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A special Training Institute on Problems of School Desegregation was held at the North Carolina Advancement School; the project was undertaken to determine the degree of attitude change related to group learning method, social attitude set, and characteristics of race, sex, and age among 72 teachers and counselors participating in an adult education program. The program, an institute on problems of school desegregation, provided an intensive educational experience which attempted, during an eight week period, to change cognitive and affective components of attitudes of prejudice among the participants. The study was concerned with the rational-irrational, social distance, and sympathetic identification dimensions of prejudice. Evidence has been presented supporting a fundamental postulate of the study that attitude change is related positively to participation in an intensive adult education experience. Attitudes of the subjects changed in the predicted direction as related to participation in the institute on all dimensions of prejudice included in the study. The findings of this research support and strengthen the postulate as a basis for future research. (se)

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ATTITUDE SET, GROUP LEARNING, AND ATTITUDE CHANGE

Dwight Carroll Rhyne

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ATTITUDE SET, GROUP LEARNING, AND ATTITUDE CHANGE

by

DWIGHT CARROLL RHYNE

A report of research conducted in connection with a Special Institute on Problems of School Desegregation held at the North Carolina Advancement School in Winston-Salem, North Carolina, June 21 - August 13, 1965. The Institute, sponsored by the University of North Carolina at Chapel Hill in association with the Learning Institute of North Carolina, was made possible by a grant from the United States Office of Education, Equal Education Opportunities Program, under the provisions of Title IV, Section 404, of Public Law 88-352, The Civil Rights Act of 1964.

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INTRODUCTION

Purpose of Study

The major purpose of this study was to determine the degree of attitude change as related to attitude set, group learning methods, and characteristics of race, age and sex. A second purpose was to evaluate the effectiveness of an intensive adult education experience, an institute on problems of school desegregation, in changing the degree of prejudice in various attitude dimensions.

The learning of attitudes has important implications for adult education. The attitude structure of adults, a dynamic concept, exists when the mature students enter a learning situation. The problem may be viewed as a need for modifying attitudes as related to a more rigid central core of attitudes or attitude set. The development of more efficient methods related to attitude change is one of the major tasks of adult education.

Attitude modification is a necessary corollary of social change. The social revolution in progress will not wait for new generations with attitudes of consensus on the questions now dividing our society. The people responsible at the present time for public policy in a democratic society, the citizens, must face the issues. Adult education can serve as an instrument for modifying attitudes as a prelude to, or consequence of, behavioral change. Improving the effectiveness of programs in the area of race relations would assist groups participating in the educational efforts to adjust to changes in the society.

Adults engage in educational activities in a deliberate effort to change while active participants in the social process. Institutional statistics attest to the increasing number of adults enrolled in adult education programs. Among the factors related to the increase in participation in adult programs are the rising median educational level, the increasing availability of leisure time, and the lengthening adult life span.

Findings of this study which indicate guiding principles for adult educators to use in designing programs in the area of race relations would make a contribution toward solving the problem. Greater understanding of the dimensions of prejudice would contribute to the development of educational remedies for this social illness. Accurate information on the effectiveness of group learning methods would assist teachers of adults to conduct seminars and group discussions more effectively.

Background Information and Statement of Problem

/ A Special Training Institute on Problems of School Desegregation was held at the North Carolina Advancement School in Winston-Salem, North Carolina from June 21 through August 13, 1965. The institute was sponsored by the

University of North Carolina at Chapel Hill in association with the Learning Institute of North Carolina. The program was made possible through a grant from the Equal Educational Opportunities Program in the United States Office of Education. Objectives of the institute were: (1) to learn more about the sociological background of various cultural and ethnic groups and of race relations; (2) to acquire greater understanding of various cultural and ethnic groups and of human relations; (3) to learn more about the relationship of the student's background to motivation and achievement; (4) to develop greater skill in dealing with administrative, classroom, or counseling problems related to school desegregation; and (5) to improve skills in teaching.

The setting for the institute was the North Carolina Advancement School, a relatively new institution supported by funds from the North Carolina Board of Education, the United States Office of Education, and the Carnegie Corporation. The converted hospital that served as a campus for the Advancement School provided the institute with a residential laboratory for the eight-week experimental session.

The North Carolina Advancement School was established to attack the twin problems of underachievement and motivation through the development of appropriate curricula and methodology at the junior high school level, and through the in-service training of teachers. The program was initiated in November, 1964 when a six-week pilot session was begun for 80 students and 10 visiting teachers. In January, 1965, a regular eleven-week session began with an enrollment of 160 students and 17 visiting teachers and counselors. An additional eleven-week session serving the school's maximum enrollment of 320 students and 35 visiting teachers was held before the institute began. To accommodate the institute, student enrollment was limited to 160 during the eight-week summer session.

There were 30 professional personnel employed at the school. The professional staff included teachers, counselors, technical specialists, a librarian, and the director. The resident staff was diverse in background and experience. The services of the biracial staff were utilized for the institute as well as for teaching, counseling, and serving the students.

The students represented a cross section of the state in socio-economic status and in ethnic group composition. One characteristic common to all, however, was their selection because of underachievement in school. They had been judged on the basis of intelligence scores and other means of evaluation to have average or above-average potential, but were achieving at one or more years below grade level in such basic areas as reading and mathematics. Within this criterion, the students possessed a wide range of abilities.

Facilities of the Advancement School were available to participants in the institute. In addition to dormitory rooms, a cafeteria, and adequate classrooms, there were two lounges, several conference rooms, and a professional library. An extensive audio-visual center included a graphics laboratory. A variety of projectors were available for 8 mm and 16 mm film, film strips, and slides as well as for overhear projection. A pulse-activated slide projector, when combined with a tape recorder, provided participants with a means for reviewing teaching behavior for use in self-evaluation.

The problem of underachievement was one of the foci of the institute. Although this problem is not limited to children in segregated schools, it is particularly characteristic of schools with minority group concentrations. Related to underachievement is the problem of motivation. Children who have not been effective as achievers tend to lose confidence in their ability, to lower their aspirations, and to lose interest in school (White, 1961). This phenomenon also is particularly apparent in segregated minority group schools. Education becomes a meaningless activity to the underachiever as he becomes increasingly alienated from the mainstream of society (Bristow, 1962).

The institute was concerned with theoretical knowledge, practical skills, and experiences in an integrated educational community. In the social and behavioral sciences, topics explored included prejudice and discrimination and their effects on motivation and achievement, values and aspirations of various groups, attitudes of students toward education and toward teachers of various races and classes, and race relations. Emphasis was given to the implications of these elements for learning and for adjustment in integrated classroom situations.

To promote the transfer of knowledge gained from psychological and sociological disciplines to the development of a more sensitive approach to teaching underachievers, institute participants were concerned with theories and methods of instruction in language arts, mathematics, science, or social studies. Instructional programs in the various areas were designed to develop skills in individualizing instruction, to relate content to student interests and aspirations, to diagnose learning difficulties, and to develop study skills with groups of students of diverse abilities, educational experiences, attitudes, and aspirations.

Participants explored the nature of different types of instructional materials as well as methods of exploiting them in a learning situation. In addition to making use of the various facilities and materials available, they practiced developing units and materials that would elicit creative responses and stimulate thinking. In general, this aspect of the program concentrated on providing participants with opportunities to gain additional knowledge and insights in their subject matter areas and in methods of instruction.

The laboratory situation afforded by the Advancement School made possible assignment of participants to appropriate classes to observe and participate in specific segments of instruction. In this aspect of the program, institute participants worked as part of instructional teams led by supervising teachers who were members of the resident staff. To gain further experience in developing and using appropriate materials, enrollees scheduled several hours each week for work in the audio-visual laboratory, the learning laboratory, and the instructional materials center. To increase their understanding of students from diverse backgrounds in an integrated situation, participants tutored boys who were having academic problems, assisted in various extra-curricular and special activities, and supervised recreational functions.

A less tangible but important aspect of the program was the requirement that all participants live as well as work in an integrated situation. Administrator, teacher, and counselor, non-white and white, old and young, male and female--all had the opportunity to participate in an intensive living and learning experience in a pluralistic setting. Participants resided at the Advancement School and assisted in the experimental program with the integrated student body.

Daily routine during the institute included two hours of seminars in sociology and in education related to race relations, prejudice, discrimination, cultural differences, theories and methods of instruction, curriculum construction, and learning. In addition, one hour was devoted to classroom observation and team teaching; one hour was utilized in the audio-visual laboratory, the learning laboratory, or the instructional materials center; and one hour was scheduled for tutoring and special activities with students. The remaining time was devoted to conferences with instructors and supervising teachers, study and preparation, and lectures by visiting faculty members.

The institute was designed to strengthen the competence of the teacher, counselor, and administrator team in dealing with problems occasioned by school desegregation. At the present time, this team is composed almost entirely of personnel who were educated in middle class schools. Middle class attitudes may influence their perception of learning and achievement. Research on attitudes of teachers toward disadvantaged children (Bloom _et al_., 1965) generally shows more negative evaluation of culturally deprived children than of those from the middle class. The institute staff sought to assist teachers, counselors, and administrators to develop a broader understanding of the dynamics of the current revolution, and to relate this understanding to problems of underachievement and motivation.

The institute furnished a foundation and served as a laboratory for the study. The initial problem was to utilize the setting to answer some critical questions related to the purposes of the study. Specific questions that warranted study and constituted a basis for this research included: (1) Does the method of group learning experience influence the degree of attitude change on the rational-irrational, social distance, and sympathetic identification dimensions of prejudice? (2) Does social attitude set influence the degree of attitude change on the selected dimensions of prejudice? (3) Do characteristics such as race, age, and sex influence the degree of attitude change on the selected dimensions of prejudice?

Objectives and Hypotheses

Utilizing the laboratory of the intensive adult education experience described in the preceding section, this study proposed to determine the degree of attitude change as related to attitude set, group learning methods, and characteristics of race, age, and sex. It proposed also to evaluate the effectiveness of the institute in changing the degree of prejudice in various attitude dimensions.

The objective of the study was to determine the degree of attitude change on the rational-irrational, social distance, and sympathetic identification dimensions of prejudice as related to: (1) social attitude set, (2) group learning method, (3) race, (4) age, and (5) sex.

A fundamental postulate of the study was that attitude change is related positively to participation in an intensive adult education experience. A second postulate, more closely related to the hypotheses to be studied, was that prominent personality interests, as indicated by evaluative attitude sets, are related to specific attitudes.

Specific hypotheses studied were:

1. Rational and irrational-pro types in the Schuman-Harding typology increased as related to participation in: (a) the structured learning group and (b) the unstructured learning group.
2. The degree of attitude change in the direction of tolerance on rational-irrational, social distance, and sympathetic identification dimensions of prejudice as related to participation in the institute is greater among subjects:
   a. In structured group learning sessions than among subjects in unstructured group learning sessions and control group.
   b. In unstructured group learning sessions than among subjects in the control group.
   c. With high social attitude sets than among subjects with medium and low social attitude sets.

d. With medium social attitude sets than among subjects with low social attitude sets.

e. Who are characterized as non-white than among subjects characterized as white.

f. Who are 41 and older than among subjects 40 and younger.

g. Who are female than those who are male.

Study Procedures

Population and Sample

The subjects for the study were 72 junior high school teachers and counselors who attended a special institute on problems of school desegregation for eight weeks during the summer of 1965. Principals and supervisors who attended the institute were not included in the study because of the different role assumed by administrators with regard to students. Over 300 principals, supervisors, teachers, and counselors of grades seven, eight, and nine applied for scholarships in response to the circulation of a brochure describing the institute. The brochure was distributed to all public schools in North Carolina. Participants were accepted on the basis of: (1) balanced administrator, teacher, and counselor teams from school systems;

(2) recommendations of their superintendents; (3) written statements as to why they wished to attend the institute; (4) college records; (5) professional experience; and (6) age.

The 72 teachers and counselors among the 94 institute participants constituted the experimental group. The race by sex and race by age composition of the subjects is indicated in Tables 1 and 2.

Table 1. Race and sex composition of the 72 junior high school teachers and counselors enrolled in the Special Training Institute on Problems of School Desegregation, June 21 - August 13, 1965

Race	Males	Females	Totals
White	18	18	36
Non-white	20	16	36
Total	38	34	72

From the 72 teachers and counselors in the experimental group, 24 were drawn at random for each of two treatment groups. The remaining 24 constituted a control group. Group I constituted the structured learning group and Group II was designated the unstructured learning group. Each of the treatment groups was randomly divided into three subgroups of eight subjects.

Table 2. Race and age composition of the 72 junior high school teachers and counselors enrolled in the Special Training Institute on Problems of School Desegregation, June 21 - August 13, 1965

Race	41 and Older	40 and Younger	Totals
White	20	16	36
Non-white	16	20	36
Total	36	36	72

All three groups of teachers and counselors participated in the program of the institute as previously described. They enrolled in two courses consisting of lectures, discussions, demonstrations and assigned readings in social and behavioral problems in race relations and in appropriate educational theory and methods related to problems of school desegregation. They participated in the Advancement School program for underachievers. All subjects lived at the school, an integrated facility, in order to learn and work with the 160 underachieving boys enrolled in the summer term.

In addition to the regular program of the institute, Groups I and II were involved in different treatments in an experimental study. Group I consisted of 24 randomly-selected teachers and counselors whose group learning sessions were given definite structure and direction. Group II similarly consisted of 24 randomly selected teachers and counselors, but in this case, the learning sessions were unstructured. In all other respects, the institute program for the structured learning group, the unstructured learning group, and the control group was the same. Groups I and II were randomly divided into three subgroups of eight subjects each. Three professional counselors met with one subgroup from Group I, the structured learning group, and one subgroup from Group II, the unstructured learning group, for two 50-minute sessions each week during the eight weeks of the institute.

The structuring factor for Group I was the control and direction of the counselor. He gave a list of questions to members of the subgroup at the beginning of each discussion session. A sample set of questions follows:

1. How can the teacher set the stage for students in an integrated school?
2. What can the school do to promote better human relations in the community?
3. Do you know of a successful plan of public school integration that was put into effect? If so, where and how was it done?
4. What problems can we expect in relation to desegregation of social events such as dances and parties?
5. Should people of different races be forced to attend integrated schools against their wishes?
6. What are your attitudes toward integrated

faculties in the schools?

7. Is it fair to all students to integrate the student body and not the faculty?
8. Should employers hire persons just because the law requires it, or should they hire the best qualified person regardless of race?
9. What are your ideas on the subject of drop-outs in relation to desegregation of the schools?
10. What do you plan to do to ease tensions of integration in your school?

In Group I, the structured learning sessions, the counselors made an effort to keep discussions closely related to questions on the agenda. They were careful to maintain meaningful controversy within subgroups by probing one side of the question and then the other. They used the technique of throwing questions back to the questioner whenever appropriate. The counselors posed questions that probed for personal experiences and attitudes of the subjects that related to the topics being discussed.

The group learning sessions for the 24 randomly-selected teachers and counselors in Group II were unstructured. The counselor in charge of each subgroup also gave a list of questions as described above to the eight members of the subgroup at the beginning of each discussion session. After passing out the questions and introducing the first question or topic, he simply listened attentively and let the discussion take its natural course. Any other references to the list of questions came from subgroup members.

All subgroups of Group I and Group II were told at the first sessions that the discussions were being held to give participants an opportunity to relate the principles learned at the institute to their local situations and problems. They were not given any information about the design of the study.

Selection of Instruments

Allport *et al.* (1960) provided a reliable, standardized scale for measuring social attitude set. The test was developed to measure the relative prominence of six basic interests or motives in personality: theoretical, economic, aesthetic, social, political, and religious. The authors designed it for use with college students or adults. The instrument was tested for internal consistency and for repeat reliability following its latest revision. The mean reliability coefficient for split-half subscales on each dimension was .90. The mean repeat reliability coefficient was .89 for a one month interval and .88 for a two month interval.

The social dimension of Allport *et al.* (1960) served as the scale for measuring social attitude set for this study. The authors describe the social life thesis as the altruistic or philanthropic aspect of love. The highest value for individuals who have a high social attitude set is love of people. The social type prizes other people as ends. In its purest form, the social attitude set is selfless and is similar to the religious dimension.

Scores on the rational-irrational dimension of prejudice were provided by an instrument developed by Schuman and Harding (1964) which measures bias for and against minority groups. Subjects were confronted with possible responses on each item that had contradictory implications for rationality as opposed to pro-minority or anti-minority attitudes. In addition to providing a means for distinguishing between subjects irrationally biased in favor of or against minority groups, the instrument indicates individuals who show little irrationality either for or against ethnic groups, and a few who are irrationally biased both for and against minorities. The authors tested the instrument for internal consistency on a sample of 229 Boston adults. The reliability coefficient was .84 on the irrational-anti scale, and .78 on the irrational-pro scale.

In order to determine the degree of cognitive change over the three assessments, the instrument was scored also by counting the rational responses on each of the two measures. When scored in this way, a gain on the rational-irrational anti-minority measure reflects a gain in rational responses in favor of minority groups. An increase in the number of rational responses on the rational-irrational pro-minority measure is actually a gain in rational responses against minorities. As the subjects were expected to increase their knowledge in the area of race relations as related to participation in the institute, a measure of cognitive change was appropriate.

The social distance dimension of prejudice was measured by the Bogardus (1936) instrument which provides a measurement of acceptance or rejection of racial, national, and religious groups. Hartley (1946) used the instrument to test a hypothesis of generalized intolerance. The method of scoring the questionnaire is to count the total number of positive (tolerant) reactions to social distance questions pertaining to specific racial, national, or religious groups, and then to divide the total by the number of groups. In addition to obtaining the total social distance score, the procedure was followed for racial and religious groups separately to obtain scores on these dimensions for this study.

The sympathetic identification dimension of prejudice was measured by the Schuman and Harding (1963) instrument developed to determine the extent to which people identify with members of an ethnic minority in a discriminatory situation. The questionnaire consists of eleven statements describing an act of discrimination or evidence of prejudice against a member of a minority group. Respondents are asked after each statement to indicate the probable reaction of the offended person to the act or situation. One of the four alternative responses reflects sympathetic identification on the part of the respondent. The internal consistency of the instrument was tested by the authors and found to be acceptable. They validated the questionnaire by administering it to three college groups assumed to have different degrees of sympathetic identification. Schuman and Harding (1963) found that sympathetic identification exists as a dimension of prejudice, and that the instrument they developed measures it simply and reliably.

Collection of Data

The study followed an experimental design. Participants took a battery of tests on the morning of the first day of the institute, June 21, 1965. The same battery was administered on the last day of the institute, August 13, 1965, and a third time in March, 1966. Instruments were mailed to the subjects for the third assessment.

Data from the 72 subjects in the experiment were complete on the first and second assessments. For the third assessment, however, only 69 of the subjects completed the instruments. Repeated efforts to obtain completed questionnaires from the three subjects were not successful.

Analysis of Data

In their research on the rational-irrational dimension of prejudice, Schuman and Harding (1964) combined anti-minority and pro-minority measures to delineate empirical typologies: irrational pro, irrational anti, rational, and confused. The point of division between rational and irrational on each scale was 48.5. The authors found, however, that over 90 percent of the college graduates in a Boston sample fell in the rational and irrational pro typologies. Recognizing that education plays an important part in the distribution of prejudice types, they lowered the point of division on the anti-minority scale to 34.5 for a sample of Radcliffe College undergraduates.

Following the precedent of flexibility established by Schuman and Harding (1964), the point of division on the anti-minority and pro-minority scales was set at the means on each scale for the subjects in the experiment. This point was 39.5 on the anti-minority scale and 57.5 on the pro-minority scale.

The decision on point of division on each scale made the choice of method of analysis simple. As the division was at the mean for the experimental group, it would be expected that an equal number of people would be above and below the mean on each scale. The number of types expected in each of the four cells of the typology would be one-fourth of the total number of subjects in the experiment. Therefore, the chi-square goodness of fit test was appropriate for determining discrepancies between the number of expected and observed types in the distribution of subjects in the typology.

For analysis of all other data collected, trend analysis (Edwards, 1963) seemed to be the most appropriate model. Trend analysis is a special adaptation of the analysis of variance model for studying the trend of means over successive trials. Additional factors that are hypothesized as having some effect on the trend may be introduced. For this study, the major source of data consisted of the three assessments of each subject over time. It was important to determine if the trend of attitude change met the requirements of statistical significance as related to factors such as group learning method, social attitude set, race, age, and sex.

The data on each attitude dimension were arranged by assessment, group learning method and social attitude set for the first analysis. Subsequent analyses were done separately by assessment and race, assessment and age, and assessment and sex. The structured learning group, unstructured learning group, and control group were designated Groups I, II, and III. Subjects were ranked high, medium, or low on social attitude type on the basis of scores on the Allport _et al._ social dimension. In the division by race, two Indians and all Negroes in the experiment were categorized as non-white, and all Caucasians as white. All subjects 41 years of age and older were characterized as old, while those 40 and younger were considered young.

To complete the data for the analysis, mean scores were introduced on each scale as the third assessment scores of each of the three subjects who failed to respond to the third assessment. The dummy values substituted for the three missing values did not add to the substance of the data, but contributed greatly to ease in calculations. The dummy values introduced were checked according to the formula described by Li (1964). The three dummy values were not considered in computing the degrees of freedom.

THEORETICAL FRAME OF REFERENCE

Group Theory and the Attitude Construct

Simmel (Wolff, 1950) advanced the notion that each individual is at a point of intersection with various social circles, the number of which is an indication of the degree of his civilization. Individuals develop in time and life space within the planes of multifarious social figures which are not necessarily circles. The social figures are of various sizes and shapes as well as of relative intensity. For example, during childhood the family figure is the most intense and important configuration. The mother's position is usually near the center of gravity; it is she who wields the greatest degree of influence over the child. The father and other members of the primary group are in relatively stable, but nonetheless changing relation to other components of the figure. In the more complex school figure, the teacher exerts the strongest cohesive force. She may be envisaged dominantly near the center of gravity while other members of the school staff and the child's peer associates fluctuate at various degrees of proximity. Play groups, Sunday school groups, and other associations complicate the representation even in this relatively simple situation.

Throughout the complex image of perpetual cross-pressures and variations in social force at relational points of contact, some general patterns are apparent. Despite the importance of associations, the individual is the nexus of the process. His various associations are related through him. The interplay of forces is reflected by changes in interests, perceptions, motivations, and attitudes in the individual and in the groups. These changes occur in accordance with known and unknown principles of social behavior related to numerous variables. The perception of personality as a process incorporating situational influences leads to analysis of change in the interaction of individuals and groups as a productive means of understanding and predicting behavior.

Lewin (1948) made a significant contribution to the study of social change by analyzing relatively simple tasks to derive principles relating to complex group processes. He reported on a comparison of a lecture method and a group method of arriving at a decision as related to behavior in carrying out the decision, *i.e.*, serving one of several suggested meats. A follow-up survey showed that three percent of the subjects who heard the lectures prior to voting a decision, and 32 percent of those who participated in the group decision, served one of the meats never served before. A similar lecture versus discussion group decision involving neighborhood groups on increasing milk consumption had the same result. In both cases, the group discussion leader structured the discussion. Lewin concludes from these and other studies that it is easier to change behavior of individuals in areas such as food habits, work production, criminality, alcoholism, and prejudices in face-to-face groups than separately. Lippitt _et al._ (1958) developed a theory that planned change involving modification of personality systems requires competent change agents to structure the process.

The attitude construct is an important means of assessing various dimensions of the relations between the individual and the groups with which he associates. If we can measure an individual's attitude toward a particular stimulus object, we can predict with a reasonable degree of accuracy his behavior toward the object in a given situation. Katz and Stotland (1960) hold that attitudes include affective, cognitive, and action components. This study included analysis of affective and cognitive elements.

Attitude Set

In discussing the attitude concept, Cooper and McGaugh (1963) state that in maturity the individual has a more or less enduring matrix of attitudes which is always in process of change. There is, however, a central core of attitudes which maintains a high degree of stability. This core of attitudes, or attitude set, guides and directs attitude change, new attitude development, and maintenance of existing attitudes.

Postman _et al._ (1948) investigated attitude set as a selective factor in perception. The Allport _et al._ (1931) scale was administered to subjects to obtain an independent measure of what they called personal value orientation, but which was defined in this study as attitude set. The authors concluded that value orientation sensitized perception to valued stimuli, led to perceptual defense against inimical stimuli, and gave rise to a process of value resonance which kept subjects responding in terms of objects valuable to them, even when such objects were absent from their immediate environment. The Allport *et al.* (1960) scale was administered to subjects in this study to obtain an independent measure of social attitude set.

Attitude Change

There have been numerous investigations in the area of attitude change. Carlson (1950) conducted a controlled experiment designed to change the affective appeal of an attitude toward a social problem by relating the problem to strongly held values of the subjects. Change in attitude was related significantly to change in perceived instrumental relationships and to change in satisfaction. Sherif (1937) found that subjects may be influenced to perceive an indefinite stimulus field in terms of an experimentally introduced norm. Deutsch and Collins (1951) inferred that there were changes in attitudes toward Negroes in a housing project that related to governmental housing policies.

Middleton (1960) conducted a study of the impact of an emotionally charged film on the attitudes of a group of university students toward Semitic people. The film carried a strong message against anti-Semitic prejudice. The researcher selected an experimental and a control group of students. Both groups completed an attitude questionnaire designed to measure anti-Semitic feeling. The experimental and control groups completed the questionnaire, the former before and after viewing the film and the latter before and after a comparable period of time. The evidence suggested that the film played a major role in reducing the expression of anti-Semitic prejudice.

One of the earlier studies on cognitive dissonance and attitude change was conducted by Scott (1957). He contrived a situation in which the subjects were required to debate an issue expressing a point of view with which they did not agree. In some cases, the contest was followed by reinforcement consisting of an indication that those subjects had won the debate. Pre- and post-tests of attitudes of subjects indicated that winners of the debates showed a significant change of attitude toward the position they had argued in the debate. The attitudes of losers had not changed significantly. Scott concluded that the reinforcement of winning the debate was generalized to related expressions of opinion.

Jones (1963) made a study of attitude change among 30 counselors in a National Defense Education Act summer institute at Clark University. Participants in the seven-week institute completed a questionnaire measuring attitudes on various dimensions related to counseling as a profession before, after, and six months following the institute. He found: (1) no significant change in attitudes toward matters relating to the administration of their agencies; (2) positive change toward accepting and understanding the counselee as a person; (3) change from a primary concern with immediate problems of the counselee toward empathetic comprehension of the total setting; (4) change toward an attitude of greater permissiveness; and (5) improved attitude of self-confidence in the use of professional techniques.

The effects of a short-term training course in changing attitudes of literacy teachers toward illiterate adults were reported by Johnson _et al_. (1968). The study described changes observed among participants in an eighteen-hour training course which was designed to assist teachers of illiterates to become better informed, to have a deeper insight, and to be more empathetic with respect to illiterate students. A 100 item true-or-false survey of attitude and opinion was administered during the first session of the course, and again during the final session six days later. The participants were then assigned to teach small classes of adults three evenings a week under supervision of school personnel. The survey was administered again to the teachers four months later. The authors found that change occurred with greater frequency among subjects between the end of training and the conclusion of four months of teaching experience than between the first and last days of the workshop. The direction of change was mixed during the four-month teaching period. Johnson _et al._ (1968) suggested the possibility that attitudinal change was contingent upon the prior acquisition of factual information relevant to the attitude.

It is evident that attitudes can be measured and that a number of variables, including education and attitude set, may be related to attitude change. Despite cognitive dissonance, change in attitudes may occur when reinforcement is introduced. There is some indication that learning method may be related to attitude change.

Racial and Religious Prejudice

Rational-Irrational Dimension

Stauber (1961) assembled a large number of studies on racial and religious prejudice, reanalyzed the data, and summarized the results. He found that more highly educated persons are less likely than those of lower educational levels to express attitudes indicating that Jews are unscrupulous in business, dishonest in public office, and too powerful and demanding. However, the better educated subjects were more likely than the less educated to give credence to certain anti-Jewish sterotypes, _i.e._, Jews are a threat to the country, many of them are Communists, or they are less willing than other groups to serve in the armed forces. Discrimination as a public policy was less acceptable to the better educated than to the less educated. The author found also that the better educated were more likely than the less educated to accept casual relationships with members of minority groups, but he found evidence to support the opposite attitude toward intimate relationships. He concluded that the impact of education on reducing prejudice is limited.

Schuman and Harding (1964) distinguished between the irrational-rational and the anti-pro dimensions of ethnic attitudes by using separate measures of bias for and against minorities. They constructed a typology of rational, irrational anti, irrational pro, and confused individuals. Their research indicated that the typology was empirically useful in studying variations in commitment to the norm of rationality among the more educated, and in distinguishing between consistent irrational bias and simple lack of rationality among the less educated.

Teachers and counselors in this experiment were in the highly educated category described by Stauber (1961) and Schuman and Harding (1964). By general population standards, participants in the institute would have been extremely tolerant in their attitudes toward minority groups. The rational-irrational dimension of prejudice was appropriate for assessing attitude change of educators.

Social Distance Dimension

Bogardus (1928) devised an instrument for measuring the social distance attitudes individuals have for members of various groups that comprise American society. He formulated a list of statements representing various degrees of social distance or intimacy. He obtained responses from 1725 Americans in 32 well-distributed areas of the United States. The sample included individuals from 18 to 35 years of age, half of whom were regularly enrolled college students and the other half, adults enrolled in graduate courses on a part time basis. On the basis of the responses, Bogardus (1928) ranked 36 racial, religious, and national groups according to the social distance attitudes expressed by the sample. English, native white Americans, and northern Europeans were near the top of the list. Southern and eastern Europeans were ranked about the middle of the 36 groups. Negroes and Orientals were near the bottom. Results were surprisingly similar in a repetition of the study 19 years later (Bogardus, 1947).

Attitudes of antipathy based upon inflexible generalizations, as Allport (1954) defined ethnic prejudice, are complex and multidimensional. Hartley (1946) used the Bogardus (1928) social distance model to test a hypothesis of generalized intolerance. He included in his list of 35 groups 32 existing groups and three non-existing groups: Daniereans, Piraneans, and Wallonians. Responses of college students to these three groups were correlated with the average tolerance expressed for the 32 existing groups. The author found positive correlations of from .78 to .85 for students from five schools involved in the study. He concluded that intolerance toward one group tends to be accompanied by intolerance toward other groups.

Social distance is a more general concept of prejudice than the rational-irrational dimension. Its inclusion in this study provided a check on the other dimensions and in addition, permitted the separation of racial and religious distance from the more general attitude as Bogardus (1936) suggested in a later work.

Sympathetic Identification Dimension

Schuman and Harding (1963) identified and measured a dimension of prejudice termed "sympathetic identification with the underdog." The term refers to sympathetic identification with members of minority groups in a prejudicial situation. The authors determined that the dimension can be measured simply and reliably. They found that it is related to standard social variables such as age and education. The dimension showed a substantial but surprisingly low correlation with social distance.

When age was controlled for a sample of Boston adults, the relation of sympathetic identification to education was indicated for young, middle-aged, and old subjects. The relation was especially strong for the oldest respondents, who were over 50. The authors felt that there might be a cross-cultural factor association with education. It is a particularly middle-class concern that siblings learn to consider the feelings of others. Socialization of lower class children may lead to personality traits that are not related to sympathetic identification.

The sympathetic identification dimension of prejudice was appropriate for this study because of the ethnic composition of the group. It was expected that non-white members of the experiment would identify more readily with minority group members exposed to acts of discrimination or prejudice. White subjects were expected to change more in the direction of sympathetic identification as related to participation in the institute. In addition, a relation to social attitude type was expected from the nature of the dimension.

ANALYSIS OF SOCIAL ATTITUDE SET, GROUP LEARNING, AND CHANGE IN ATTITUDES OF PREJUDICE

Rational-Irrational Dimension

Distribution of Typology

Schuman and Harding (1964) conducted research on prejudice from the standpoint of prejudgment, overgeneralization, and refusal to change attitudes in the face of contradictory evidence. They distinguished the rational-irrational dimension from the anti-pro dimension of prejudice by the use of separate measures which were employed in this study. The anti and pro-minority scales were combined to delineate empirical typologies: irrational pro, irrational anti, rational, and confused. The cutting point in dividing each scale into a rational and an irrational part was 48.5. The reasoning behind this decision was that a respondent who answers half the items in the rational direction and half in the irrational direction receives a score of 48.

The authors found, however, that over 90 percent of the college graduates in a Boston sample fell in the rational and irrational-pro cells of the typology. Recognizing that education plays an important part in the distribution of prejudice types, they lowered the cutting point on the anti scale to 34.5 for a group of Radcliffe College undergraduates. Following the precedent of flexibility established by Schuman and Harding (1964), the cutting points on the anti and pro scales were set at the means for the subjects in this study. On the pro scale, this point was 57.5; on the anti scale, 39.5.

It was expected that a chi-square test for goodness of fit on the distribution of prejudice types among the subjects would indicate significant change on the post and follow-up test scores. The change was assumed on the basis of a fundamental postulate of this study to the effect that attitude change is related positively to participation in an intensive adult education experience. A specific hypothesis for this part of the analysis was that rational and irrational-pro types in the Schuman-Harding typology increased as related to participation in: (a) the structured learning group and (b) the unstructured learning group. Increase in each of the two types indicated would mean a decrease in either or both of the remaining types. Some reversal of direction in all four categories was expected from post to follow-up test on the assumption that influences in the local communities would counteract, to some extent the effect of the institute. Table 3 indicates the distribution of prejudice types among 72 subjects in the experiment.

The number of subjects in the irrational-anti and confused categories decreased from pre- to post test. The irrational-anti type increased from post to follow-up test, but the confused type continued to decrease from post to follow-up. The irrational-pro type increased substantially from pre- to post, but showed little change thereafter. The

Table 3. Distribution of Schuman-Harding prejudice types among 72 junior high school teachers and counselors participating in an institute on problems of school desegregation

Assessment	N	Typology				χ^2 3 d.f.	p
		Irrational Anti	Irrational Pro	Rational	Confused		
[1] Pre-test	72	21	17	18	16	.78	
[2] Post test	72	10	36	15	11	24.78	<.005
[3] Follow-up test	72	13	35	18	6	25.45	<.005

rational type showed little change throughout the series of assessments.

If the rational types in assessment two (post) and three (follow-up) were essentially the same subjects as the rational types in assessment one (pre-), it is evident that the institute had little effect on their attitudes on the rational-irrational dimension of prejudice. The rational type could be said to have followed the advice of Plato to let reason rule their emotions. The remaining three-fourths of the population shifted from one type to another in interesting and significant ways. The confused irrationals, who scored high on irrationality on both anti and pro scales, decreased five from first to second assessment, and five from second to third assessment. The irrational-anti type decreased 11 from first to second, and increased three from second to third assessment. The greatest gain, 19, was in the irrational-pro type from first to second assessment. The decrease of one was negligible from second to third assessment.

The next step in the analysis of the distribution of typology was to take a closer look at the learning group dimension. It was expected that change would be most evident in the structured learning group and least evident in the control group. Tables 4, 5, and 6 show the distribution of prejudice types among subjects in the structured and unstructured learning groups and the control group.

Table 4. Distribution of Schuman-Harding prejudice types among 24 junior high school teachers and counselors in Group I, the structured learning group

Assessment	N	Typology				x^2	p
		Irrational Anti	Irrational Pro	Rational	Confused	3 d.f.	
1 Pre-test	24	5	6	9	4	2.32	
2 Post test	24	1	11	5	7	8.66	<.05
3 Follow-up test	24	4	15	3	2	18.33	<.005

Structuring the group learning sessions seems to have had a delayed effect on the rational-irrational dimension of prejudice. The number of subjects in the irrational-anti category decreased substantially from assessment one (pretest) to assessment two (post test). In the third assessment (follow-up test), it reverted back toward the original distribution. The irrational-pro type increased by five from assessment one to assessment two but contrary to expectations, continued to increase from assessment two to assessment three. The effect of structuring the group learning sessions seems to have continued during the seven months following the end of the institute. The same interpretation is suggested by the continuing decrease in the rational type from assessment two to assessment three as well as from assessment one to assessment two. The decrease in number of rational types was especially surprising. As the structured group learning sessions were closely related to the subject matter of the sociology and education courses, it was expected that the distribution of types at the end of the institute would reflect a greater number of rational responses. It appears, however, that structured group learning on matters associated with prejudice is related to a decrease in rationality which, in turn, results from an increase in irrational attitudes in favor of minority groups. The distribution of the confused type fluctuated in a perplexing manner. The number in the confused cell increased from assessment one to assessment two and decreased from assessment two to assessment three. The development seems to lend support to the suggestion that the reduction of prejudice on the rational-irrational dimension as related to structured group learning tends to be reflected in a delayed effect.

Table 5. Distribution of Schuman-Harding prejudice types among 24 junior high school teachers and counselors in Group II, the unstructured learning group

Assessment	N	Typology				χ^2 3 d.f.	p
		Irrational Anti	Irrational Pro	Rational	Confused		
Pre-test[1]	24	9	4	6	5	2.33	
Post test[2]	24	2	14	4	4	14.66	<.005
Follow-up test[3]	24	4	11	6	3	6.33	

The change in distribution of prejudice types from assessment one to assessment two was significant for the unstructured learning group and control group as well as the structured learning group. It should be noted that the change in distribution was highly significant on assessment two for Group II. However, there were some interesting

Table 6. Distribution of Schuman-Harding prejudice types among 24 junior high school teachers and counselors in Group III, the control group

Assessment	N	Typology				x^2	p
		Irrational Anti	Irrational Pro	Rational	Confused	3 d.f.	
1 Pre-test	24	7	7	3	7	2.00	
2 Post test	24	7	11	6	0	10.33	<.05
3 Follow-up test	24	5	9	9	1	7.33	

variations in distribution of rational-irrational types that appeared with the third assessment. Neither of the observed distributions among subjects in unstructured learning and control groups was significantly different from those expected. The observed distribution among the subjects in the structured learning group was significantly different from the expected distribution.

Pro-Minority Attitudes

Trend analysis as described by Edwards (1963) seemed to offer an excellent model for determining whether certain characteristics of the change over three assessments were significant. Characteristics of concern included high, medium, and low social attitude set as indicated by scores on Allport _et al._ (1960) social dimension; structured and unstructured group learning sessions and control group; older subjects, 41 years of age or more and younger subjects, 40 years of age or less; white and non-white subjects; and male and female subjects.

The irrational-pro type reflected the greatest change over assessments in the analysis of change in distribution of the Schuman-Harding typology. It seemed likely that trend analysis would indicate similar results. Specific hypotheses tested on the pro-minority dimension of the rational-irrational scale were:

> The degree of attitude change in the direction of tolerance on the pro-minority dimension of the rational-irrational scale as related to participation in the institute is greater among subjects:
>
> a. In structured group learning sessions than among subjects in unstructured group learning sessions and control group.
>
> b. In unstructured group learning sessions than among subjects in the control group.
>
> c. With high social attitude sets than among subjects with medium and low social attitude sets.

d. With medium social attitude sets than among subjects with low social attitude sets.

e. Who are characterized as non-white than among subjects characterized as white.

f. Who are 41 and older than among subjects 40 and younger.

g. Who are female than among subjects who are male.

Trend analysis showed a significant increase in pro-minority attitudes on the rational-irrational dimension as related to participation in the institute. As expected, there was a decrease on the same dimension between the second assessment, taken at the end of the institute, and the third assessment seven months later. A summary of the data by group and assessment is presented in Table 7.

All specific hypotheses related to the degree of attitude change by learning group method, by social attitude set, and by race, age, and sex were rejected for the rational-irrational pro-minority dimension of prejudice. Although the increase in mean scores was greater for both learning groups than for the control group, the differences were not significant. The predicted differences by social attitude set and assessment also failed to materialize. A summary of the analysis of variance by assessment, social attitude set, and group learning is shown in Table 8.

Table 7. Summary of rational-irrational pro-minority attitudes of 72 junior high school teachers and counselors by learning group and assessment

Learning Group	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
I Structured	N=24 $\bar{X}$=60.63 SD=16.22	N=24 $\bar{X}$=67.54 SD=13.25	N=24 $\bar{X}$=66.21 SD=15.76	N=72 $\bar{X}$=64.79 SD=15.43
II Unstructured	N=24 $\bar{X}$=55.33 SD=12.18	N=24 $\bar{X}$=65.21 SD=14.74	N=24 $\bar{X}$=57.25 SD= 9.91	N=72 $\bar{X}$=59.26 SD=13.15
III Control	N=24 $\bar{X}$=56.33 SD=13.43	N=24 $\bar{X}$=59.45 SD=16.30	N=24 $\bar{X}$=58.21 SD=16. 6	N=72 $\bar{X}$=58.00 SD=15.69
Total	N=72 $\bar{X}$=57.43 SD=14.23	N=72 $\bar{X}$=64.07 SD=15.20	N=72 $\bar{X}$=60.56 SD=15.09	N=216 $\bar{X}$=60.69 SD=15.09

A fundamental postulate of the study, that attitude change is related positively to participation in an intensive adult education experience, was supported. The F value, reflecting change by assessment, was 10.91 with two and 124 degrees of freedom indicating significance at the .001 level of confidence. It is apparent that participation in the institute on problems of school desegregation was related to greater tolerance on the pro-minority dimension of prejudice.

Table 8. Analysis of variance of rational-irrational pro-minority attitudes of 72 junior high school teachers and counselors by learning group, social attitude set, and assessment

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	p
Learning group	1878.73	2	939.37	1.79	<.25
Social attitude set	1385.06	2	692.53	1.32	
Learning group by social attitude set	892.63	4	223.16	<1	
Error A	32620.17	62	526.13		
Assessment	1588.51	2	794.26	10.91	<.001
Learning group by assessment	492.77	4	123.19	1.69	<.25
Social attitude set by assessment	225.75	4	56.43	<1	
Learning group by social attitude set by assessment	1093.39	8	136.67	1.88	<.25
Error B	9025.58	124	72.79		
Total	49202.59	212			

Analyses of the rational-irrational pro-minority dimension of prejudice by assessment and age and by assessment and sex indicated no significant differences. In the analysis by assessment and race, however, the data reflected some interesting differences. Non-white subjects scored significantly higher on the rational-irrational pro-minority dimension. This evidence seemed to indicate that non-white subjects were more irrational in their pro-minority sentiments. A summary of the data by assessment and race is shown in Table 9.

Table 9. Summary of rational-irrational pro-minority attitudes of 72 junior high school teachers and counselors by race and assessment

Race	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
Non-white	N=36 $\bar{X}$=63.53 SD=12.32	N=36 $\bar{X}$=69.14 SD=14.12	N=36 $\bar{X}$=67.31 SD=14.85	N=108 $\bar{X}$=66.66 SD=14.00
White	N=36 $\bar{X}$=51.33 SD=13.38	N=36 $\bar{X}$=59.00 SD=14.53	N=36 $\bar{X}$=53.81 SD=11.99	N=108 $\bar{X}$=54.71 SD=13.72
Total	N=72 $\bar{X}$=57.43 SD=14.23	N=72 $\bar{X}$=64.07 SD=15.20	N=72 $\bar{X}$=60.56 SD=15.09	N=216 $\bar{X}$=60.69 SD=15.09

The F value, reflecting difference by race, was 18.28 with one and 69 degrees of freedom indicating significance at the .001 level of confidence. There was no significant difference on the interaction dimension of computation rejecting the hypothesis that attitudes of white subjects would change more in the direction of tolerance on the pro-minority measure. A summary of the analysis of variance by assessment and race is shown in Table 10.

Table 10. Analysis of variance of rational-irrational pro-minority attitudes of 72 junior high school teachers and counselors by race and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Race	7704.16	1	7704.16	18.28	<.001
Error A	29072.43	69	421.34		
Assessment	1588.51	2			
Assessment by race	103.36	2	51.68	<1	
Error B	10734.13	138	77.78		
Total	49202.59	212			

Anti-Minority Attitudes

The trend analysis model was followed in analyzing anti-minority attitudes of subjects as measured by the Schuman-Harding scale. As on the pro-minority scale, a high score indicates irrational attitudes, but on the anti-minority scale, the irrationality shows bias against minority groups. Specific hypotheses tested were the same as those tested by the pro-minority scale. The rational-irrational anti-minority dimension of the instrument was designed so that the lower scores reflected more rationality and greater tolerance than the higher scores.

Trend analysis indicated a significant decrease in anti-minority prejudice as related to participation in the institute. There was a slight increase in mean score from assessment two to assessment three for the entire experimental group indicating some increase in anti-minority sentiment after subjects returned to their local communities. The F value, reflecting change by assessment, was 6.77 with two and 124 degrees of freedom. A summary of the analysis by social attitude set and assessment is shown in Table 11.

Table 11. Summary of rational-irrational anti-minority attitudes of 72 junior high school teachers and counselors by social attitude set and assessment

Social attitude set	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
High	N=24 $\bar{X}$=37.58 SD= 8.68	N=24 $\bar{X}$=32.17 SD= 6.32	N=24 $\bar{X}$ 32.00 SD= 5.31	N=72 $\bar{X}$=33.92 SD= 7.38
Medium	N=24 $\bar{X}$=44.42 SD=12.89	N=24 $\bar{X}$=36.71 SD=11.17	N=24 $\bar{X}$=40.38 SD=12.05	N=72 $\bar{X}$=40.50 SD=12.46
Low	N=24 $\bar{X}$=37.54 SD= 7.22	N=24 $\bar{X}$=39.04 SD=15.85	N=24 $\bar{X}$=37.75 SD= 8.94	N= 72 $\bar{X}$=38.11 SD=11.32
Total	N=72 $\bar{X}$=39.85 SD=10.41	N=72 $\bar{X}$=35.97 SD=12.12	N=72 $\bar{X}$=36.71 SD= 9.83	N=216 $\bar{X}$=37.51 SD=10.96

The hypotheses predicting a differential decrease in irrational prejudice toward minority groups by group learning method were rejected. However, there was a significantly different change by social attitude set and assessment. Subjects with high and medium social attitude sets became more tolerant on the rational-irrational anti scale by assessment than subjects with low social attitude sets. In fact, subjects with low social attitude sets actually gained slightly in anti-minority sentiment from assessment one to assessment two. The same subjects became slightly more tolerant in anti-minority bias between the end of the institute and the follow-up assessment seven months later. The latter change was also contrary to the change reflected for high and medium social attitude types. There was no significant differential change between the high and medium social attitude types. A summary of the analysis of variance by group learning method, social attitude type, and assessment is shown in Table 12.

In addition to the differential change in attitudes, there was a persistent difference in the degree of rational-irrational anti-minority sentiment by social attitude set. High and low social attitude types showed less anti-minority prejudice on the rational-irrational dimension than medium social attitude types except on the second assessment. The surprising increase in scores by low social attitude type subjects on the post test carried the mean for

Table 12. Analysis of variance of rational-irrational anti-minority attitudes of 72 junior high school teachers and counselors by learning group, social attitude set, and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Learning group	180.12	2	90.06	<1	
Social attitude set	1599.37	2	799.69	4.23	<.025
Learning group by social attitude set	557.07	4	139.26	<1	
Error A	11710.75	62	188.88		
Assessment	609.84	2	304.92	6.77	<.005
Learning group by assessment	305.35	4	76.34	1.69	< .25
Social attitude set by assessment	619.77	4	154.94	3.44	<.025
Learning group by social attitude set by assessment	717.96	8	89.75	1.99	<.10
Error B	5585.75	124	45.05		
Total	21885.98	212			

this category above the mean for the medium social attitude type subjects. It is possible that the relatively low anti-minority prejudice indicated by scores of high and low social attitude types relates to extremes of concern or unconcern for one's fellow man. The individual who values other humans as ends in themselves apparently tends to be rational in rejecting anti-minority statements. On the other hand, one who has little concern for others may not let his emotions get in the way of rational judgment with regard to minority groups. An interpretation of the data might be advanced that the moderate social attitude type is more easily influenced for or against minority groups by interests and concerns not related to love of people. Economic, political, or aesthetic concerns might dominate his hierarchy of values. Whatever the interpretation, the relation between social attitude set and anti-minority prejudice on the rational-irrational dimension is a complex one.

The hypothesis that degree of attitude change in the direction of tolerance on the rational-irrational anti-minority dimension as related to participation in the institute is greater among subjects who are 41 and older than among subjects 40 and younger was accepted. A summary of data by assessment and age is shown in Table 13.

There was almost no change in the mean score for subjects 40 and younger from first to second assessment, and little change from second to third. The contrast with subjects 41 and older is striking. Their anti-minority sentiments were some higher on assessment one, considerably lower on assessment two, and slightly higher on assessment three than the subjects 40 and younger. The difference in degree of attitude change between the two categories of

Table 13. Summary of rational-irrational anti-minority attitudes of 72 junior high school teachers and counselors by age and assessment

Age	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
40 and younger	N=36 $\bar{X}$=38.08 SD=10.26	N=36 $\bar{X}$=38.00 SD=10.31	N=36 $\bar{X}$=36.19 SD= 9.94	N=108 $\bar{X}$=37.42 SD=10.87
41 and older	N=36 $\bar{X}$=41.61 SD=10.26	N=36 $\bar{X}$=33.94 SD= 8.14	N=36 $\bar{X}$=37.22 SD= 9.70	N=108 $\bar{X}$=37.59 SD= 9.92
Total	N=72 $\bar{X}$=39.85 SD=10.41	N=72 $\bar{X}$=35.97 SD= 9.51	N=72 $\bar{X}$=36.71 SD= 9.84	N=216 $\bar{X}$=37.51 SD=10.06

subjects was reflected in an F value of 5.54 with 2 and 138 degrees of freedom, which was significant at the .005 level of confidence. A summary of the analysis of variance by assessment and age is shown in Table 14.

The older teachers and counselors who participated in the institute seem to have been more flexible and willing to change anti-minority attitudes than their younger colleagues. The change would have been more gratifying, however, if it had been more enduring. Nevertheless, the mean score of the subjects 41 and older was not significantly different from that of the younger group seven months after the institute ended.

Table 14. Analysis of variance of rational-irrational anti-minority attitudes of 72 junior high school teachers and counselors by age and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Age	1.50	1	1.50	<1	
Error A	14045.81	69	203.57		
Assessment	609.84	2			
Assessment by age	537.58	2	268.79	5.54	<.005
Error B	6691.25	138	48.49		
	21885.98	212			

The hypotheses pertaining to degree of attitude change by race and sex were not accepted. Change by assessment and sex approached but did not reach the level of significance required. Difference in degree of attitude change on the anti-minority dimension between male and female subjects was reflected in an F of 2.76 with two and 138 degrees of freedom. The greater change toward tolerance was indicated by the scores of female subjects as predicted.

The Cognitive Factor

As attitudes have cognitive as well as affective components, a variation in scoring the Schuman and Harding (1964) instrument was employed to provide a measure of cognitive change. The variation in method of scoring was to count the rational responses of each subject on each assessment rather than scoring rational and irrational responses one and three, respectively, as the authors did. The approach was followed on the assumption that gain or loss in number of rational responses would indicate cognitive change.

The rational responses on the rational-irrational pro-minority scale are actually anti-minority in meaning, and those on the anti-minority scale are pro-minority. As Schuman and Harding (1964) indicate, rational statements do not refer to formal logic or incontrovertible fact, but rather to everyday logic and probable fact that would be involved in general conversation. Nevertheless, the institute course on race relations considered extensive information related to the responses. Eliminating the scoring of irrational choices and counting only the rational pro- or anti-responses gave an indication of cognitive change on the two dimensions. Descriptive terms used in this analysis will coincide with actual meaning attributed to the scales.

Rational pro-minority responses supported a basic postulate of the study that attitude change is related positively to participation in an intensive adult education experience. Rational anti-minority responses changed in the expected direction but did not reach the .05 level of significance. Rational pro-minority responses by social attitude type and assessment and the rational anti-minority responses by treatment and assessment are shown in Tables 15 and 16.

Table 15. Summary of rational pro-minority attitudes of 72 junior high school teachers and counselors by social attitude set and assessment

Social attitude set	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
High	N=24 $\bar{X}$=8.72 SD=2.10	N=24 $\bar{X}$=10.10 SD= 0.67	N=24 $\bar{X}$=10.20 SD= 0.67	N=72 $\bar{X}$=9.67 SD=1.47
Medium	N=24 $\bar{X}$=7.27 SD=3.04	N=24 $\bar{X}$=7.78 SD=3.24	N=24 $\bar{X}$=8.39 SD=2.14	N=72 $\bar{X}$=7.81 SD=2.89
Low	N=24 $\bar{X}$=8.51 SD=2.42	N=24 $\bar{X}$=7.48 SD=2.34	N=24 $\bar{X}$=8.08 SD=2.52	N=72 $\bar{X}$=8.19 SD=2.44
Total	N=72 $\bar{X}$=8.16 SD=2.63	N=72 $\bar{X}$=8.62 SD=2.57	N=72 $\bar{X}$=8.89 SD=2.16	N=216 $\bar{X}$=8.56 SD=2.47

Hypotheses on the degree of attitude change in the direction of tolerance on the rational pro-minority dimension were rejected in the analysis by assessment, social attitude set, and learning group. No significant change was reflected in the interaction analysis. There were significant differences in rational pro-minority attitudes by social type. The F value of 4.31 with two and 124 degrees of freedom indicated significance at the .01 level of confidence. Rational pro-minority attitudes of the subjects with high and medium social attitude sets changed more in the direction of tolerance than those with low social attitude sets, but the difference was not statistically significant. The F value of 2.54 indicated that the greater change reflected by the responses could have occurred by chance less than 10 percent of the time, but the .05 level of confidence was not reached.

Table 16. Summary of rational anti-minority attitudes of 72 junior high school teachers and counselors by learning group and assessment

Learning group	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
Structured	N=24 $\bar{X}$=11.75 SD= 3.77	N=24 $\bar{X}$=10.67 SD= 3.05	N=24 $\bar{X}$=10.50 SD= 3.77	N=72 $\bar{X}$=10.97 SD= 3.59
Unstructured	N=24 $\bar{X}$=13.17 SD= 3.53	N=24 $\bar{X}$=11.17 SD= 3.53	N=24 $\bar{X}$=12.50 SD= 2.92	N=72 $\bar{X}$=12.28 SD= 3.44
Control	N=24 $\bar{X}$=13.17 SD= 4.12	N=24 $\bar{X}$=13.50 SD= 4.12	N=24 $\bar{X}$=13.14 SD= 4.61	N=72 $\bar{X}$=13.14 SD= 4.30
Total	N=72 $\bar{X}$=11.25 SD= 3.34	N=72 $\bar{X}$=12.36 SD= 4.31	N=72 $\bar{X}$=12.78 SD= 3.83	N=216 $\bar{X}$=12.13 SD= 3.90

All hypotheses were rejected on the rational anti-minority dimension. Subjects in the unstructured learning group and the control group tended toward higher scores on the test than subjects in the structured learning group, but the difference was not significant. Summaries of analyses of variance by assessment, social attitude set, and group learning method on the rational pro- and anti-minority dimensions are shown in Tables 17 and 18.

Table 17. Analysis of variance of rational pro-minority attitudes of 72 junior high school teachers and counselors by learning group, social attitude set, and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Learning group	11.96	2	5.98	<1	
Social attitude set	177.37	2	88.69	4.31	<.01
Learning group by social attitude set	69.74	4	17.44	<1	
Error A	1276.25	62	20.58		
Assessment	99.07	2	49.54	11.66	<.001
Learning group by assessment	27.70	4	6.93	1.63	<.25
Social attitude set by assessment	43.13	4	10.78	2.54	<.10
Learning group by social attitude set by assessment	60.93	8	7.62	1.79	<.25
Error B	526.50	124	4.25		
Total	21885.98	212			

Table 18. Analysis of variance of rational anti-minority attitudes of 72 junior high school teachers and counselors by learning group, social attitude set, and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Learning group	171.37	2	85.69	2.65	<.10
Social attitude set	89.81	2	44.91	1.39	
Learning group by social attitude set	52.44	4	13.11	1	
Error A	2006.75	62	32.37		
Assessment	35.15	2	17.58	2.79	<.10
Learning group by assessment	43.52	4	10.88	1.73	
Social attitude set by assessment	30.58	4	7.65	1.22	
Learning group by social attitude set by assessment	74.75	8	9.34	1.48	
Error B	780.00	124	6.29		
Total	3284.37	212			

A part of the analysis of data on the cognitive factor which may be of particular interest to adult educators is the section on assessment and age. There was no significant difference in attitude change by age on the rational anti-minority dimension. On the pro-minority dimension, however, the hypothesis that the degree of attitude change in the direction of tolerance is greater among subjects 41 and older than among those 40 and younger was accepted. If the measure reflects cognitive gain as assumed, it would indicate that older subjects in the experiment learned more in this dimension than their younger colleagues. During the seven months in their local communities between the end of the institute and the follow-up assessment, however, the younger subjects gained slightly while the older subjects showed evidence of some loss. A summary of data and the analysis of variance by age and assessment on the rational pro-minority dimension are shown in Tables 19 and 20.

Table 19. Summary of rational pro-minority attitudes of 72 junior high school teachers and counselors by age and assessment

Age	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
40 and younger	N=36 $\overline{X}$=18.86 SD= 3.20	N=36 $\overline{X}$=19.50 SD= 3.18	N=36 $\overline{X}$=19.83 SD= 3.23	N=108 $\overline{X}$=19.40 SD= 3.23
41 and older	N=36 $\overline{X}$=17.94 SD= 3.41	N=36 $\overline{X}$=20.44 SD= 3.17	N=36 $\overline{X}$=19.47 SD= 2.90	N=108 $\overline{X}$=19.29 SD= 3.29
Total	N=72 $\overline{X}$=18.40 SD= 3.34	N=72 $\overline{X}$=19.97 SD= 3.14	N=72 $\overline{X}$=19.65 SD= 3.08	N=216 $\overline{X}$=19.34 SD= 3.26

Table 20. Analysis of variance of rational pro-minority attitudes of 72 junior high school teachers and counselors by age and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Age	.67	1	.67	<1	
Error A	1534.65	69			
Assessment	99.07	2			
Age by assessment	32.85	2	16.43	3.62	<.05
Error B	625.41	138	4.53		
Total	2292.65	212			

Social Distance Dimension

Social Distance

Level of education is positively related to degree of tolerance, but as the literature of social psychology indicates, several other factors influence an individual's attitudes toward minority groups. Highly educated teachers and counselors, such as the subjects for this study, are not immune to these various influences. The social distance scale is a measure of attitudes toward various minority groups on the dimension of association. The respondent indicates the degree of intimacy or distance that is desirable or acceptable in his association with the 26 groups included in the instrument.

Social distance is a more general concept of prejudice than other dimensions considered in this study. The concept is similar to popular notions of prejudice which tend to overlook such refinements as rational-irrational and sympathetic identification dimensions. The measure has the advantage of facilitating the separation of racial and religious distance from the total scale.

The pre-, post, and follow-up assessments of social distance supported the postulate that attitude change is related positively to participation in an intensive adult education experience. Trend analysis of the data indicates attitude change in the direction of tolerance for the 72 teachers and counselors. The F value for assessment was 6.22, which indicated significance at the .005 level of confidence. A summary of the data by social attitude set and assessment is shown in Table 21.

Hypotheses on the degree of attitude change by learning group method were rejected. The analysis of variance by learning group method, social attitude set, and assessment indicated, however, that there was a significant difference in degree of attitude change on social distance by social attitude type over the three assessments. The F value for interaction of social attitude set and assessment was 7.87 which, with four and 124 degrees of freedom, indicated significance at the .025 level of confidence. A summary of the analysis of variance by group learning method, social attitude set, and assessment is shown in Table 22.

Table 21. Summary of social distance attitudes of 72 junior high school teachers and counselors by social attitude set and assessment

Social attitude set	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
High	N=24 $\bar{X}$= 8.35 SD= 2.20	N=24 $\bar{X}$= 9.63 SD= .73	N=24 $\bar{X}$=10.15 SD= .52	N=72 $\bar{X}$= 9.38 SD= 2.45
Medium	N=24 $\bar{X}$= 6.31 SD= 2.99	N=24 $\bar{X}$= 6.87 SD= 3.14	N=24 $\bar{X}$= 7.33 SD= 2.61	N=72 $\bar{X}$= 6.84 SD= 2.94
Low	N=24 $\bar{X}$= 7.31 SD= 2.90	N=24 $\bar{X}$= 6.58 SD= 3.53	N=24 $\bar{X}$= 7.20 SD= 3.17	N=72 $\bar{X}$= 7.03 SD= 3.22
Total	N=72 $\bar{X}$= 7.32 SD= 2.83	N=72 $\bar{X}$= 7.69 SD= 3.08	N=72 $\bar{X}$= 8.23 SD= 2.75	N=216 $\bar{X}$= 7.75 SD= 2.91

The gain in social distance score, which indicates greater tolerance of various racial, religious, and national groups, was consistent over assessments for high and medium social attitude types. There was a substantial increase in attitudes of prejudice on the social distance dimension for low social attitude types as related to participation in the institute which was almost balanced by an increase in attitudes of tolerance between the end of the institute and the follow-up test seven months later. There was no significant difference in attitude change on this dimension between high and medium social attitude types.

Table 22. Analysis of variance of social distance attitudes of 72 junior high school teachers and counselors by learning group, social attitude set, and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Learning group	54.85	2	27.43	1.64	<.25
Social attitude set	288.32	2	144.16	8.61	<.001
Learning group by social attitude set	63.36	4	15.84	<1	
Error A	1037.82	62	16.74		
Assessment	29.95	2	14.98	6.22	<.005
Learning group by assessment	3.32	4	.83	<1	
Social attitude set by assessment	31.46	4	7.87	3.27	<.025
Learning group by social attitude set by assessment	27.73	8	3.47	1.44	<.25
Error B	298.74	124	2.41		
Total	1835.55	212			

The analysis of variance indicates a substantial difference in social distance attitudes between subjects with high social attitude set and those with medium and low social attitude sets. The difference is reflected in an F value for social attitude set of 8.61 which is significant at the .001 level of confidence with two and 62 degrees of freedom. The high social attitude types in the experiment were consistently more tolerant of various racial, religious, and national groups than medium and low social attitude types.

Hypotheses on the degree of attitude change on the social distance dimension by age and by sex were rejected. Analysis by race and assessment, however, had a different result. The hypothesis that the degree of attitude change in the direction of tolerance on the social distance dimension of prejudice as related to participation in the institute is greater among subjects who are characterized as non-white than among subjects characterized as white was accepted. A summary of the data by race and assessment is shown in Table 23.

Attitudes of white subjects on the social distance dimension of prejudice changed very little over the three assessments. Attitudes of non-white subjects on this dimension, however, showed consistent change over assessments in the direction of greater tolerance for various racial, religious, and national groups. Means for white and non-white subjects were almost identical at the beginning of the institute. A summary of the analysis of variance by race, sex, and assessment is shown in Table 24.

Table 23. Summary of social distance attitudes of 72 junior high school teachers and counselors by race and assessment

Race	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
White	N=36 $\bar{X}$= 7.33 SD= 2.66	N=36 $\bar{X}$= 6.91 SD= 3.23	N=36 $\bar{X}$= 7.42 SD= 2.91	N=108 $\bar{X}$=7.22 SD=2.95
Non-white	N=36 $\bar{X}$= 7.32 SD= 3.00	N=36 $\bar{X}$= 8.46 SD= 2.71	N=36 $\bar{X}$= 9.03 SD= 2.59	N=108 $\bar{X}$=8.27 SD=2.86
Total	N=72 $\bar{X}$= 7.32 SD= 2.83	N=72 $\bar{X}$= 7.69 SD= 3.08	N=72 $\bar{X}$= 8.23 SD= 2.75	N=216 $\bar{X}$=7.75 SD=2.91

Racial Distance

The racial distance measure for this study consisted of those items in the social distance scale that referred to representative subgroups of various races. Subgroups included were American Negroes, African Negroes, white Americans, Filipinos, Chinese Americans, Japanese Americans, American Indians, Mexican Americans, and Indians from India. Scores were obtained by counting the positive responses on 11 items indicating acceptance of members of the subgroups and dividing the total by the number of subgroups. The purpose in varying the approach was to determine whether analysis indicated different racial distance attitudes from those shown by the total social distance dimension of prejudice.

Table 24. Analysis of variance of social distance attitudes of 72 junior high school teachers and counselors by race, sex, and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Race	59.64	1	59.64	2.98	<.10
Sex	10.85	1	10.85	<1	
Race by sex	31.61	1	31.61	1.58	<.25
Error A	1342.25	67	20.03		
Assessment	29.95	2			
Race by assessment	30.06	2	15.03	6.01	<.001
Sex by assessment	.02	2	.01	<1	
Race by sex by assessment	1.20	4	.30	<1	
Error B	329.97	132	2.50		
Total	1835.55	212			

Analysis of variance of racial distance attitudes by learning group, social attitude set, and assessment indicated additional support for the assumption that attitude change is related positively to participation in an intensive adult education experience. The F value for assessment, with two and 124 degrees of freedom, was 4.54, indicating significance at the .025 level of confidence. A summary of the data by social attitude set and assessment is shown in Table 25.

Table 25. Summary of racial distance attitudes of 72 junior high school teachers and counselors by social attitude set and assessment

Social attitude set	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
High	N=24 $\bar{X}$= 8.87 SD= 1.90	N=24 $\bar{X}$= 9.98 SD= 1.08	N=24 $\bar{X}$=10.53 SD= 0.49	N=72 $\bar{X}$=9.79 SD=1.47
Medium	N=24 $\bar{X}$= 6.94 SD= 2.88	N=24 $\bar{X}$= 7.64 SD= 3.13	N=24 $\bar{X}$= 7.72 SD= 2.81	N=72 $\bar{X}$=7.44 SD=2.96
Low	N=24 $\bar{X}$= 7.60 SD= 2.64	N=24 $\bar{X}$= 7.05 SD= 3.59	N=24 $\bar{X}$= 7.63 SD= 3.69	N=72 $\bar{X}$=7.43 SD=3.19
Total	N=72 $\bar{X}$= 7.91 SD= 2.64	N=72 $\bar{X}$= 8.22 SD= 3.09	N=72 $\bar{X}$= 8.63 SD= 2.83	N=216 $\bar{X}$=8.22 SD=2.88

Hypotheses on the degree of racial distance change in the direction of tolerance by learning group method were rejected. Analysis also indicated that hypotheses on differential change in racial distance by social attitude set were not accepted, but interaction on this dimension approached significance. The F value of 2.23 with four and 124 degrees of freedom indicated that these results would occur by chance less than one time in ten.

The subjects with high social attitude set scored consistently higher on racial distance responses than subjects with medium and low social attitude set. The scale is designed so that higher scores indicate greater tolerance of racial groups. The difference by social attitude set was reflected by an F value of 8.09 with two and 62 degrees of freedom, which indicated significance at the .001 level of confidence. Table 26 summarizes the analysis by learning group, social attitude set, and assessment.

The hypothesis that the degree of attitude change in the direction of tolerance on the racial distance dimension of prejudice as related to participation in the institute is greater among subjects characterized as non-white than among subjects characterized as white was accepted. Table 27 shows the means and standard deviations of data on this dimension by race and assessment.

Subjects characterized as white became slightly more prejudiced on the racial distance dimension as related to participation in the institute. Non-white subjects, on the other hand, showed indications of becoming much more tolerant of various racial groups. Only three of the 11 subgroups included in the racial distance score were represented in the institute: American Negroes, American Indians, and white Americans. It is possible that the Negroes and Indians in the experiment were able to identify more readily with other minority groups after learning about their sociological and behavioral characteristics in the course on race relations. The analysis of variance of racial distance attitudes by race and assessment in Table 28 shows that

Table 26. Analysis of variance of racial distance attitudes of 72 junior high school teachers and counselors by learning group, social attitude set, and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Learning group	31.70	2	15.85	<1	
Social attitude set	267.28	2	133.64	8.09	<.001
Learning group by social attitude set	57.16	4	14.29	<1	
Error A	1024.12	62	16.52		
Assessment	24.25	2	12.13	4.54	<.025
Learning group by assessment	6.81	4	1.70	<1	
Social attitude set by assessment	23.85	4	5.96	2.23	<.10
Learning group by social attitude set by assessment	26.21	8	3.28	1.23	
Error B	331.38	124	2.67		
Total	1792.76	212			

the race by assessment interaction has an F value of 5.43 with two and 138 degrees of freedom, indicating significance at the .025 level of confidence.

Analyses of the social distance and the racial distance dimensions indicated similar results, but there were some differences. Assessment, change in attitude by race and

Table 27. Summary of racial distance attitudes of 72 junior high school teachers and counselors by race and assessment

Race	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
White	N=36 $\bar{X}$= 7.56 SD= 2.48	N=36 $\bar{X}$= 7.38 SD= 3.15	N=36 $\bar{X}$= 7.52 SD= 3.15	N=108 $\bar{X}$=7.49 SD=2.98
Non-white	N=36 $\bar{X}$= 8.05 SD= 2.76	N=36 $\bar{X}$= 9.07 SD= 2.68	N=36 $\bar{X}$= 9.74 SD= 1.92	N=108 $\bar{X}$=8.95 SD=2.58
Total	N=72 $\bar{X}$= 7.81 SD= 2.64	N=72 $\bar{X}$= 8.23 SD= 3.09	N=72 $\bar{X}$= 8.63 SD= 2.83	N=216 $\bar{X}$=8.22 SD=2.88

assessment, and social attitude set were sources of significant variation in both analyses. Change over assessment by social attitude type was significant in the analysis of data on the social distance dimension, and race was a source of significant variation on the measure of racial distance.

Religious Distance

The religious distance dimension turned out to be one of the most interesting parts of the study. Subgroups included were Catholics, atheists, Jews, Baptists, and Protestants. Responses were scored in the same way as those on the social distance and racial distance scales.

Table 28. Analysis of variance of racial distance attitudes of 72 junior high school teachers and counselors by race and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Race	115.72	1	115.72	6.31	<.025
Error A	1264.54	69	18.33		
Assessment	24.25	2			
Race by assessment	28.32	2	14.16	5.43	<.025
Error B	359.93	138	2.61		
Total	1792.76	212			

Like most of the analyses in this study, the analysis of religious distance data supported the postulate that attitude change is related positively to participation in an intensive adult education experience. Change in religious distance toward greater acceptance of the various religious groups included in the instrument was apparent over the three assessments. The assessment F value of 3.89 with two and 124 degrees of freedom was significant at the .025 level of confidence. A summary of the data by social attitude set and assessment is shown in Table 29.

Social type as a source of variation had an F value of 6.02 with two and 62 degrees of freedom, indicating significance at the .005 level of confidence. Subjects with high social attitude sets indicated consistently greater

Table 29. Summary of religious distance attitudes of 72 junior high school teachers and counselors by social attitude set and assessment

Social attitude set	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
High	N=24 $\bar{X}$= 8.72 SD= 2.10	N=24 $\bar{X}$=10.10 SD= .67	N=24 $\bar{X}$=10.20 SD= .67	N=72 $\bar{X}$=9.67 SD=1.49
Medium	N=24 $\bar{X}$= 7.27 SD= 3.04	N=24 $\bar{X}$= 7.78 SD= 3.24	N=24 $\bar{X}$= 8.39 SD= 2.14	N=72 $\bar{X}$=7.81 SD=2.88
Low	N=24 $\bar{X}$= 8.51 SD= 2.42	N=24 $\bar{X}$= 7.98 SD= 2.34	N=24 $\bar{X}$= 8.08 SD= 2.52	N=72 $\bar{X}$=8.19 SD=2.44
Total	N=72 $\bar{X}$= 8.17 SD= 2.63	N=72 $\bar{X}$= 8.62 SD= 2.57	N=72 $\bar{X}$= 8.89 SD= 2.16	N=216 $\bar{X}$=8.56 SD=2.48

tolerance on the religious distance dimension than those with medium and low social attitude sets. On the basis of mean scores, subjects with medium social attitude sets scored lower on the first assessment, about the same on the second assessment, and somewhat higher on the third assessment than subjects with low social attitude sets. The analysis of variance of religious distance by learning group, social attitude set, and assessment in Table 30 indicates significant variations.

The hypothesis that the degree of attitude change in the direction of tolerance on the religious distance

Table 30. Analysis of variance of religious distance attitudes of 72 junior high school teachers and counselors by learning group, social attitude set, and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Learning group	40.86	2	20.43	1.76	<.25
Social attitude set	139.59	2	69.80	6.02	<.005
Learning group by social attitude set	30.81	4	7.70	<1	
Error A	718.49	62	11.59		
Assessment	19.37	2	9.69	3.89	<.025
Learning group by assessment	1.57	4	.39	<1	
Social attitude set by assessment	32.48	4	8.12	3.26	<.025
Learning group by social attitude set by assessment	40.73	8	5.09	2.04	<.05
Error B	309.03	124	2.49		
Total	1332.93	212			

dimension of prejudice, as related to participation in the institute, is greater among subjects with high social attitude set than among those with medium and low social attitude set was accepted. The same hypothesis was accepted for differential change between subjects with medium social attitude sets and those with low social attitude sets.

Interaction by social attitude set and assessment had an F value of 3.26 with four and 124 degrees of freedom, indicating significance at the .025 level of confidence.

The interaction of learning group, social attitude set, and assessment had an F value of 2.04 with eight and 124 degrees of freedom, which was significant at the .05 level of confidence. An examination of the data indicates that high social attitude types in the structured and unstructured learning groups reflected substantially greater acceptance of religious groups as related to participation in the institute than low social low attitude types. Actually, the low social attitude types became more prejudiced on this dimension as related to participation in structured and unstructured learning groups. All three social attitude types in the control group made moderate gains on this measure of tolerance between the first and second assessments, but on the assessment seven months after the institute ended, the pattern changed. High and medium social attitude types in the control group continued to gain in attitudes of tolerance on this dimension while low social attitude types indicated greater prejudice. Scores on religious distance in the follow-up assessment were mixed for structured and unstructured learning groups, but attitude change in the degree of prejudice on this dimension was slight. The complex reaction of social attitude types to group learning method over assessment was not predicted, but it indicated that additional study of the interaction of these three factors deserves attention in future research.

The hypothesis that the degree of attitude change in the direction of tolerance on the racial distance dimension of prejudice as related to participation in the institute is greater among subjects who are characterized as non-white than among subjects characterized as white was accepted. The summary of religious distance attitudes by race and assessment is shown in Table 31.

Table 31. Summary of religious distance attitudes of 72 junior high school teachers and counselors by race and assessment

Race	Assessment			Total
	1. Pre-test	2. Post test	3. Follow-up test	
White	N=36 $\overline{X}$= 8.51 SD= 2.36	N=36 $\overline{X}$= 8.39 SD= 2.88	N=36 $\overline{X}$= 8.56 SD= 2.12	N=108 $\overline{X}$=8.49 SD=2.48
Non-white	N=36 $\overline{X}$= 7.82 SD= 2.84	N=36 $\overline{X}$= 8.84 SD= 2.19	N=36 $\overline{X}$= 9.23 SD= 2.17	N=108 $\overline{X}$=8.63 SD=2.49
Total	N=72 $\overline{X}$= 8.17 SD= 2.63	N=72 $\overline{X}$= 8.62 SD= 2.57	N=72 $\overline{X}$= 8.89 SD= 2.16	N=216 $\overline{X}$=8.56 SD=2.48

The means of the assessments by race indicate that the white subjects changed very little in attitudes on religious distance over the three assessments. The non-white subjects, however, were substantially more prejudiced on this dimension at the beginning of the institute, but they became progressively more tolerant as related to participation in the institute and during the seven months following their intensive adult education experience. The analysis of variance of religious distance by race, sex, and assessment is shown in Table 32.

A difference shown in the analysis of religious distance as contrasted with analyses of social distance and racial distance was the significant interaction of learning group, social attitude set, and assessment. Subjects in the experiment reacted differently to each of the three dimensions, although there was considerable similarity in results. The division of the social distance scale into the subdivisions of racial and religious distance scales contributed to an understanding of the complexity of attitude change among teachers and counselors who participated in the institute.

Sympathetic Identification Dimension

The sympathetic identification dimension was not an effective measure for this study. The variance in sympathetic identification with minority groups in a prejudicial situation was extreme among subjects in the experiment.

Table 32. Analysis of variance of religious distance attitudes of 72 junior high school teachers and counselors by race, sex, and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Race	1.03	1	1.03	<1	
Sex	.51	1	.51	<1	
Race by sex	30.25	1	30.25	2.26	
Error A	897.96	67	13.40		
Assessment	19.37	2			
Race by assessment	19.30	2	9.65	3.67	<.05
Sex by assessment	11.07	2	5.54	2.11	
Race by sex by assessment	5.97	4	1.49	<1	
Error B	347.47	132	2.63		
Total	1332.93	212			

Even though change in attitude was in the predicted direction on each dimension of the analysis, the differences between the means were not statistically significant. Nevertheless, a fundamental postulate of the study that attitude change is related positively to participation in an intensive adult education experience was supported. Analysis of the data indicated attitude change in the direction of tolerance on the sympathetic identification dimension of prejudice. The F value for the assessment variation was 11.12, with two and 124 degrees of freedom. The value indicates significance at the .001 level of confidence. A summary of the data by learning group and assessment is shown in Table 33.

Table 33. Summary of sympathetic identification attitudes of 72 junior high school teachers and counselors by learning group and assessment

Learning group	Assessment			Total
	1. Pre test	2. Post test	3. Follow-up test	
Structured	N=24 $\bar{X}$=31.25 SD= 5.88	N=24 $\bar{X}$=26.88 SD= 5.97	N=24 $\bar{X}$=27.25 SD= 6.92	N=72 $\bar{X}$=28.46 SD= 6.58
Unstructured	N=24 $\bar{X}$=28.67 SD= 7.52	N=24 $\bar{X}$=27.04 SD= 7.63	N=24 $\bar{X}$=27.00 SD= 9.03	N=72 $\bar{X}$=27.57 SD= 8.13
Control	N=24 $\bar{X}$=29.46 SD= 7.14	N=24 $\bar{X}$=26.92 SD= 7.44	N=24 $\bar{X}$=28.00 SD= 7.70	N=72 $\bar{X}$=28.13 SD= 7.50
Total	N=72 $\bar{X}$=29.79 SD= 6.97	N=72 $\bar{X}$=26.94 SD= 7.06	N=72 $\bar{X}$=27.42 SD= 7.94	N=216 $\bar{X}$=28.05 SD= 7.44

A high score on the sympathetic identification scale indicates low sympathetic identification. The lower mean scores of the subjects over assessments is obvious. There was greater change in attitudes on this dimension among subjects in the structured learning group than among those in the unstructured learning group and the control group, but the difference was not significant. A summary of the analysis of variance by group learning method, social attitude set, and assessment is shown in Table 34.

Table 34. Analysis of variance of sympathetic identification attitudes of 72 junior high school teachers and counselors by learning group, social attitude set, and assessment

Source of variation	Sum of squares	Degree of freedom	Mean square	F	p
Learning group	29.04	2	14.52	<1	
Social attitude set	196.26	2	98.13	<1	
Learning group by social attitude set	1062.35	4	265.59	2.00	
Error A	8232.12	62	132.78		
Assessment	335.29	2	167.67	11.12	<.001
Learning group by assessment	68.40	4	17.10	1.13	
Social attitude set by assessment	45.93	4	11.48	<1	
Learning group by social attitude set by assessment	118.55	8	14.82	<1	
Error B	1868.50	124	15.07		
Total	11,956.44	212			

Although attitude change occurred on the sympathetic identification dimension, as shown by the variation by assessment, the measure developed by Schuman and Harding (1963) was apparently not fine enough to distinguish between the various factors in this study. All hypotheses on the sympathetic identification dimension of prejudice were rejected.

CONCLUSIONS AND IMPLICATIONS

Conclusions

This study was undertaken to determine the degree of attitude change related to group learning method, social attitude set, and characteristics of race, sex, and age among 72 teachers and counselors participating in an adult education program. The program, an institute on problems of school desegregation, provided an intensive educational experience which attempted, during an eight week period, to change cognitive and affective components of attitudes of prejudice among the participants. The study was concerned with the rational-irrational, social distance, and sympathetic identification dimensions of prejudice.

Evidence has been presented supporting a fundamental postulate of the study that attitude change is related positively to participation in an intensive adult education experience. Attitudes of the subjects changed in the predicted direction as related to participation in the institute on all dimensions of prejudice included in the study. The findings of this research support and strengthen the postulate as a basis for future research.

Specific hypotheses accepted in this study were:

1. Rational and irrational-pro types in the Schuman-Harding typology increased as related to participation in:

  - a. The structured learning group.
  - b. The unstructured learning group.

2. The degree of attitude change in the direction of tolerance as related to participation in the institute was greater:
    - a. On the rational-irrational anti-minority dimension of prejudice among subjects:
        - (1) With high and medium social attitude sets than among subjects with low social attitude sets.
        - (2) Who were 41 years of age and older than among subjects 40 and younger.
    - b. On the rational (cognitive) pro-minority dimension of prejudice among subjects who were 41 and older than among subjects 40 and younger.
    - c. On the social distance dimension of prejudice among subjects:
        - (1) With high social attitude sets than among subjects with medium and low social attitude sets.
        - (2) Who were classified as non-white than among subjects classified as white.

d. On the racial distance dimension of prejudice among subjects who were classified as non-white than among subjects classified as white.

e. On the religious distance dimension of prejudice among subjects:
   (1) With high social attitude sets than among those with low social attitude sets.
   (2) Who were characterized as non-white than among those characterized as white.

In addition to the hypotheses accepted, social attitude set was consistently related to the degree of prejudice indicated on several dimensions. High social attitude set was positively related to the degree of tolerance on the rational-irrational anti-minority, the rational (cognitive) pro-minority, social distance, racial distance, and religious distance dimensions of prejudice. Non-white subjects indicated a greater degree of tolerance on the rational-irrational pro-minority dimension.

There was little evidence to support the hypotheses on learning group method. The data almost invariably indicated that attitude change by learning group method was in the predicted direction but there was not enough change for statistical significance. On the basis of the findings, however, it was concluded that learning group method as incorporated in the institute program had no significant effect on attitude change.

Implications and Suggestions for Research

The findings of this study should encourage adult educators to design programs including systematic efforts to change attitudes as well as to change the cognitive structure of participants. Findings of this study indicate that intensive educational programs can change affective and cognitive components of several attitude dimensions of prejudice. Adult education can assist various groups in our society to develop more flexible attitudes toward minority groups.

Program planners should consider different levels of attitudes in designing programs to change attitudes. The central core of attitudes defined as attitude set has been shown to have a relation to the degree of change on several attitude dimensions. The literature of social psychology indicates that psychological factors, social environment, and educational background are related to value orientation or attitude set. A consideration of these factors will assist adult educators in making conscious efforts to effect attitude change.

This study indicates the need for additional research to explore the relation of other attitude sets to attitude change. Political, economic, religious, theoretical, and aesthetic value orientations as defined by Allport _et al._ (1960) should be elements in studies similar to this one on social attitude set. It is probable, for example, that high theoretical attitude set is positively related to the degree of change on the rational (cognitive) dimension of specific attitudes. Additional research in the area would assist learning theorists to develop more adequate theories of adult learning.

Change in attitude as related to learning group method will require additional study to determine the importance of employing different approaches to group learning. The findings of this study were inconclusive in this area. Learning group method was a small part of the total institute program. Increasing the proportion of institute time devoted to structured and unstructured group learning sessions or using those methods exclusively for different groups would produce more definitive results.

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APPENDICES

Appendix A. Glossary of Terms

The following definitions of terms used in this study are given to provide more concise meaning to the material and analysis presented.

Attitude - For purposes of this study, the Allport (1954) definition of attitude is appropriate. He defined attitude as a mental and neural state of readiness, organized through experience, exerting a directive and dynamic influence upon the individual's response to all objects and situations with which it is related.

Attitude set - Consists of a central core or enduring matrix of attitudes (Cooper and McGaugh, 1963) which maintains a high degree of stability. An attitude set guides and directs attitude change, new attitude development, and the maintenance of existing attutudes.

Group learning - In the study, group learning refers to organized, small group discussion activity under the direction of professional counselors. Structured and unstructured group learning sessions are described fully in the text.

Prejudice - Refers to the total complex involved in the rigid prejudgment and misjudgment of groups (Simpson and Yinger, 1958). Misjudgment is implicit in the rigid prejudgment of persons or groups without concern for verification of the opinion or examination of the merits of the judgment. The term may be distinguished from discrimination which involves overt behavior rather than a predilection for certain kinds of behavior.

Racial distance - A subdimension of the social distance scale that includes representative subgroups in various racial categories.

Rational-irrational anti-minority dimension of prejudice - An attitude dimension based on a scale developed by Schuman and Harding (1964). The measure shows anti-minority bias on the rational-irrational dimension. A high score indicates irrational anti-minority bias. A low score indicates rationality, which reflects more favorable attitudes toward minority groups on this scale.

Rational-irrational pro-minority dimension of prejudice - An attitude dimension based on a scale developed by Schuman and Harding (1964) to measure pro-minority bias on the rational-irrational dimension. A high score on the scale indicates irrational pro-minority bias. A low score indicates rationality, which reflects less favorable attitudes toward minority groups on this scale.

Religious distance. A subdimension of social distance that includes subgroups in various religious categories.

Sympathetic identification dimension of prejudice - A measure of sympathetic identification with a member of an ethnic minority facing discrimination developed by

Schuman and Harding (1963). A low score indicates less prejudice on this dimension.

Social distance - A measure of acceptance or rejection of racial, national, and religious groups developed and validated by Bogardus (1928).

Appendix B. Instrument

Groups Survey

On the next pages you will find some pairs of statements. You are to choose the statement in each pair that seems to be the more correct of the two in your own judgment. (You do not have to decide whether any statement is completely correct or completely incorrect, but only which of the two statements seems to be the more correct to you.)

Show your choice for each pair by the following two steps: First, check the letter (either A or B) of the statement that you think is the more correct one. Then check the number of the one phrase ("Not very sure," "Moderately sure," or "Very sure") that best tells how sure you feel that the statement you have chosen is the more correct of the two.

For example, the first pair of statements below deals with American Indians. Read both statements. Check the letter of the statement that you think is the more correct one. Then check the number of the phrase that best indicates how sure you feel.

CHECK A OR B	CHECK HOW SURE YOU FEEL OF YOUR CHOICE
1. ___ A. Some American Indians are definitely much superior in intelligence to some white people.	___ 1. Not very sure ___ 2. Moderately sure ___ 3. Very sure
___ B. Few if any American Indians are really superior in intelligence to any white people.	

Now go ahead and do the other pairs in the same way.

Please be sure to answer all of the pairs.

2. ___ A. American Jewish groups rarely, if ever attempt to influence our country's policies toward other nations.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. American Jewish groups sometimes work behind the scenes to influence, or even pressure, our government's policies with regard to other nations.

3. ___ A. The percentage of children born to unmarried mothers is higher among Negroes than among white people.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. The percentage of children born to unmarried mothers among Negroes is about the same as among white people.

4. ___ A. While every group has a right to get ahead, the Jews are a little too apt to disregard the rights and possessions of other people.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. Jews and Christians are pretty much alike in their regard for the rights and possessions of other people.

5. ___ A. Mexican-American children in this country are at a lower educational level, on the average, than other American children.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. Mexican-American children in this country are at about the same educational level, on the average, as other American children.

6. ___ A. It is a fairly well-established fact that Negroes have a less pleasant body odor than white people.

___ B. It is doubtful that there is much difference in body odor between Negroes and whites.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

7. ___ A. Japanese-Americans rarely try to outdo their business rivals.

___ B. The success of Japanese-Americans has frequently meant hardship for their white American business rivals.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

8. ___ A. There are more Jews in well-paid professions, like law and medicine, than their percentage in the country would lead one to expect.

___ B. There are probably no more Jews in highly paid professions, like law and medicine, than their percentage in the country would lead one to expect.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

9. ___ A. Although Negroes may be behind white people in some areas of achievement, there is definitely no difference between the two races in basic intelligence.

___ B. We cannot rule out the possibility that Negroes as a group average below white people in intelligence.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

10.___ A. The problem with letting so many Puerto Ricans into this country is that most members of that group are not capable of really learning American customs and ideals.

___ B. It is likely that there are many Puerto Ricans who live up to American ideals better than the average white American who has been here much longer.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

11.___ A. Very little of the heavy industry in the United States is controlled by persons of Jewish descent.

___ B. About half the heavy industry (steel, machine tools, etc.) in the United States is controlled directly or indirectly by Jews and about half by non-Jews.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

12.___ A. A great number of Negroes in this country have some white ancestry.

___ B. Except in a few cases, most Negroes in this country are still of pure African ancestry.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

13.___ A. There is really no difference in the time or type of holidays celebrated by Jews and other Americans.

___ B. Jewish people sometimes take off holidays while other Americans are hard at work.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

14.___ A. There may be some truth in the image of the Puerto Rican in this country as a little less ambitious and hard-working on the average than many other groups.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. Puerto Ricans in the United States have certainly demonstrated that they are as ambitious and hard-working as any racial or national group in the country.

15.___ A. Negroes should be given every opportunity to get ahead, but they could never be capable of holding the top leadership positions in a country like ours.

___ 1. **Not very sure**
___ 2. **Moderately sure**
___ 3. **Very sure**

___ B. Some of the ablest and most intelligent people in the United States today are Negroes.

16.___ A. The abilities of highly educated Mexicans in this country are more like those of highly-educated white Americans than like those of little educated Mexican-Americans.

___ 1. **Not very sure**
___ 2. **Moderately sure**
___ 3. **Very sure**

___ B. The abilities of highly-educated Mexicans in this country are more like those of other Mexican-Americans than like those of highly-educated white Americans.

17.___ A. If there were complete equality of opportunity tomorrow, American Indians would almost immediately show themselves equal to whites in job skills and in most other areas.

___ 1. **Not very sure**
___ 2. **Moderately sure**
___ 3. **Very sure**

___ B. Even if there were complete equality of treatment tomorrow, there would still be a sizeable gap between whites and American Indians in job skills and in many other areas.

18.___ A. Christians may not like to consider it, but it is possible that Jewish lawyers are more honest, on the average, than Christian lawyers.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. While some Jewish lawyers are quite honest, the average Jewish lawyer is not as honest as the average Christian lawyer.

19.___ A. When a Negro family moves into an all-white neighborhood, it sometimes leads to serious disturbance.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. The moving of a single, respectable Negro family into an all-white neighborhood never really leads to serious disturbances.

20.___ A. While there are no doubt a few exceptions, in general Jews tend to be especially clannish (keep to their own group) almost from birth.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. Jews are probably no more clannish than many other national or religious groups.

21.___ A. Perhaps because of their traditions, Orientals tend to be just a little sneaky in most of their dealings in this country, though of course there are some exceptions.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. There are Orientals in this country today who are more honest and open-dealing than the typical American.

22.___ A. Some Negroes are clean and some are dirty, but the average Negro does not differ in any way in his personal habits from the average white person in the United States.

___ B. One must admit that many Negroes in this country do not live up to the standards of cleanliness usually expected among better educated people.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

23.___ A. Relatively few Jews in the United States have known what it's like to work with their hands as farmers, as the American pioneers did.

___ B. Jews are spread quite evenly through all types of occupations in our country.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

24.___ A. It is certainly possible for mixed Negro-white housing areas to have as high property values as all-white areas.

___ B. When Negroes move into good white neighborhoods, property values are sure to drop.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

25.___ A. Some Jews are rich and some are poor, but the average income of Jews is the same as that of other national and religious group in America.

___ B. Jews, on the average, make more money than the majority of national and religious groups in our country.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

26.___ A. It is hard to understand all the reasons, but whites and Negroes can never get along well with one another if they mix and mingle too closely.

___ B. When whites and Negroes mix together closely--by living on the same block, eating and entertaining in one another's homes, and so forth--their relations may well improve greatly.

___ 1. **Not very sure**
___ 2. **Moderately sure**
___ 3. **Very sure**

27.___ A. While there are a few exceptions, even the more successful Mexican-Americans tend to remain slightly dirty and unkempt.

___ B. There is probably no difference between the cleanliness of Mexican-Americans and other Americans of the same educational level.

___ 1. **Not very sure**
___ 2. **Moderately sure**
___ 3. **Very sure**

28.___ A. On the average, Jews are probably as honest as most other groups in America.

___ B. On the average, there is something just a little less honest about Jews than about most Americans.

___ 1. **Not very sure**
___ 2. **Moderately sure**
___ 3. **Very sure**

29.___ A. Almost all Japanese Americans in this country are loyal citizens of the United States.

___ B. One thing so many Japanese Americans seem to have in common is a tendency to put their loyalty to Japan ahead of their loyalty to the United States.

___ 1. **Not very sure**
___ 2. **Moderately sure**
___ 3. **Very sure**

30.___ A. Physical characteristics of Negroes, such as dark skins or woolly hair, do not necessarily indicate anything about mental or moral traits.

___ B. The typical Negroid features--dark skin, broad nose, woolly hair--are probably related to the more primitive nature of the Negro.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

31.___ A. The difficulties between American Indians and others in this country have nothing to do with drunkenness, disease, or ignorance among the Indians.

___ B. Many white people would accept American Indians more easily if there were less drunkenness, disease, and ignorance among them.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

32.___ A. The percentage of Jews who have gotten into influential positions in the motion picture and television industries is greater than the percentage of Jews in the general population.

___ B. The percentage of Jews with influence in the motion picture and television industries is no greater than would be expected on the basis of the number of Jews in the general population.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

33.___ A. The percentage of Negroes convicted of murder is higher than the percentage of white people convicted of murder.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. The percentage of whites who commit murder is about the same as the percentage of Negroes who commit murder.

34.___ A. In general, the Jews in the United States tend to use their power more selfishly than do most other groups.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

___ B. The Jews in the United States do not tend to use their power more selfishly than do most other groups.

35.___ A. Only a few extreme white people are against equal treatment for Negroes in restaurants, hotels and similar places.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

___ B. Negroes sometimes try to enter stores, hotels, and restaurants where they are just not welcome.

36.___ A. It must be admitted that in large cities of the United States, there is a higher percentage of delinquency and crime among Puerto Rican youth than among native-born white youth.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

___ B. In large cities of the United States there is the same rate of delinquency and crime among Puerto Rican youth as among native-born youth.

37.___ A. In general, Negroes who have openly opposed segregation in the South have shown unusual self-restraint and courage.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

___ B. It takes no special virtue for Negroes to oppose segregation openly in the South.

38.___ A. Most of the biggest industries in America are controlled by persons of at least some Jewish background.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

___ B. Jews do not control most of the biggest American industries.

39.___ A. Scientists have shown that there is no difference in intelligence between American Indians and white people in this country.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

___ B. It is possible that there is some difference in intelligence between the average white person and the average American Indian.

40.___ A. Because they have felt intolerance against themselves, Negroes tend to show much less intolerance toward other groups than do most people.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

___ B. If Negroes were to have dominant political power in this country, they might well show real intolerance toward white people.

41.___ A. It is pretty certain that some Jews in this country have been draft-dodgers from the military service that is required of American youth.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

___ B. It may not be widely known, but far more Jewish men have volunteered for the military services than one would expect on the basis of their percentage in the population as a whole.

42.___ A. One of the main characteristics of Puerto Ricans in the United States is their sexual looseness and immorality.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. The sexual standards of many Puerto Ricans are as high as those of other Americans.

43.___ A. Considering all the circumstances, race relations in the United States have always been pretty good.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. In all sections of the United States, Negroes are denied opportunities for many good jobs and promotions that are given to white people.

44.___ A. Jews have little real control over the American money system, in spite of the wealth of some individual Jews.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. Jewish power and control over the American money system is far out of proportion to the number of Jews in the total population.

45.___ A. Chinese workers in this country have often made things hard for other workers by their willingness to take low wages.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. Chinese in this country have rarely been willing to work for lower wages than other Americans.

46.___ A. Racial integration in housing, recreation, and similar areas of life may well lead to more Negro-white intermarriage and mixed-blood children.

___ 1. Not very sure
___ 2. Moderately sure
___ 3. Very sure

___ B. Racial integration in housing, recreation, and similar areas of life has nothing to do with the rate of intermarriage between Negroes and whites.

47.___ A. Many Puerto Ricans are quite intelligent--above the average for the white population of the United States.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

___ B. Some Puerto Ricans may be very capable, but the group as a whole is unfortunately much less capable and intelligent than the white American population.

48.___ A. Jews are not at all different in business matters from other Americans.

___ 1. Not very sure

___ 2. Moderately sure

___ 3. Very sure

___ B. There may be some truth to the image of Jews, on the average, as shrewder in business matters than non-Jews.

Group Distance Scale

We would like to ask you about your reactions to certain groups of people. Please give your reaction to each social group as a general class of people, not to either the best, or the worst of that group you have known. Remember to give your first reaction for each group. Check as many responses for each group that you feel are appropriate. Please make your checks as distinct as possible in each box.

Work as rapidly as you can in answer to the question: "I would willingly accept members of the ___________ group ..."

	Japanese Americans	Indians, American	Catholics	Germans	Puerto Ricans	Cubans	Mexicans	Atheists	Japanese	Communists	Spaniards	Jews	Negroes, American	Norwegians	Filipinos	Italians	Russians	Negroes, African	Chinese	Mexican Americans	White Americans	Baptists	Chinese Americans	Socialists	Indians, from India	Protestants
1. to marry as either my husband, wife, or to my son or daughter.																										
2. to marry my brother, sister, aunt, uncle, or cousin.																										
3. to have as an intimate, personal friend.																										
4. to swim in the same pool that I use.																										
5. to invite to my home with friends of my own social group.																										
6. to invite to my home as a friend.																										
7. to belong to my social or fraternal club.																										
8. to live in the same apartment building that I do.																										
9. to live in the same neighborhood that I do.																										
10. to be a co-worker on my job.																										
11. to work in the same profession that I do.																										

Reactions Questionnaire

How do different groups react in typical situations? Below are some situations involving various groups. After each situation four possible choices are given. Put a check (✓) next to the choice that you feel is the best answer to the question asked for each situation. Leave the other three choices blank.

This is a questionnaire rather than a test: your own personal opinion is the best way to answer each question. This questionnaire takes only about fifteen minutes to complete.

. . . . . .

1. A colored man born in New England goes South for the first time and sees in a Mississippi bus station two waiting rooms, one for colored and one for whites. How do you think he would be likely to react to this?

    ___ 1. He probably thinks it is a good thing at present, since it prevents trouble from arising.

    ___ 2. He may notice it at first, but after a while he probably gets used to it and it doesn't make much difference to him.

    ___ 3. He very likely feels hurt by it, and perhaps angry.

    ___ 4. It is hard to know exactly how he would react to such a situation, though with more information one might be able to tell.

2. A Jewish man walking through a store hears one woman say to another, "That Betty, she's always trying to Jew the sales price down." What do you suppose the Jewish man's reaction is likely to be?

    ___ 1. Underneath he doesn't like what he has overheard.

___ 2. Very likely the comment goes in one ear and out the other.

___ 3. It is difficult for a non-Jew to know exactly how a Jewish person would react to this.

___ 4. If he is interested at all, it might be in several things: for example, in knowing who was such a good bargainer or what was on sale.

3. A Chinese couple opens a Chinese restaurant in a large American city. The restaurant is quite successful, but often customers mispronounce the names of Chinese foods when ordering meals. How would Chinese owners be most likely to react to this?

___ 1. They would feel hurt that their customers do not take the trouble to learn to pronounce Chinese words correctly.

___ 2. They would understand why Americans are likely to have trouble with a language like Chinese that they have never studied.

___ 3. Without talking to the Chinese couple about the matter, it is impossible to know how they would react.

___ 4. Probably the Chinese couple never even notices such mistakes in pronunciation by Americans.

4. A white person, while walking in a colored section of the city realizes that he is hungry. He enters the first restaurant that he sees, expecting to eat a good meal. As he approaches a table, the manager politely asks him to leave, as the owner's policy is to provide service for colored people. How do you think he would react?

___ 1. It would depend on whether or not he had ever been refused service before in a restaurant for colored people.

___ 2. He would not be too concerned, but would look for the next restaurant that would serve him.

___ 3. He would be furious, but could now understand how it felt to be denied some privilege which he formerly had taken for granted.

___ 4. It would not bother him, but he would not come back to this section of the city again.

5. A colored man who is working on a construction gang is always called "boy" or "Black Sambo" by the Superintendent, whereas the white workers doing the same job are called by their actual first names. How is the colored man likely to react to this?

___ 1. It probably makes little difference, since over the years he is likely to have become used to it.

___ 2. He probably resents it and may even hate the Superintendent for talking to him in this way.

___ 3. He may well regard it as a friendly, informal way of speaking to him, especially if the superintendent is generally a nice person.

___ 4. The story does not give enough information to tell how he would react in this particular case.

6. A Jewish person reads that some teenage boys have painted anti-Jewish slogans on a Jewish clothing store. What is his reaction likely to be?

___ 1. One cannot judge fairly without knowing more about the particular Jewish person and his make-up.

___ 2. Unless it was a store that he owned or traded in, he would probably not pay too much attention to the incident.

___ 3. He probably regards it as a harmless boyish prank, something the boys will grow out of in time.

___ 4. He takes this seriously and doesn't like it at all.

7. Two Chinese girls got jobs in a large American business office. The white girls in the office are polite, but do not want to become too friendly with them. What is the reaction of the Chinese girls likely to be?

___ 1. They might prefer it this way, since they have each other as friends and would rather not mix too much with white people.

___ 2. Probably it makes little difference if the job is good in all other ways.

___ 3. The Chinese are so different in some of their customs that it would be difficult for a person who is not Chinese to figure out exactly what they would think.

___ 4. They would almost certainly feel sad or angry or both.

8. A Jewish boy graduates from his religious school. A Christian family that lives down the block hears of this and decides to send a small gift to the Jewish boy. What will be the Jewish family's most likely reaction when the gift arrives from the Christian family?

___ 1. The Jewish parents probably will not like having Christians try to take part in what is usually just a Jewish occasion.

___ 2. Since it will be only one of a number of gifts received by the boy, the Jewish family will take little or no notice of it.

___ 3. The Jewish parents will very likely consider this a nice act by the Christian family and will be pleased.

___ 4. The Jewish parents will probably be a little suspicious and wonder just what is in the mind of the Christian family in sending the gift.

9. A white person born in New York City goes to Birmingham, Alabama, to visit his relatives. It is the first time in his life that he has been in the South. While shopping in a department store, he sees two water fountains side by side. On one is a sign marked "White". On the other is a sign marked "Colored". How do you think he would react to this?

___ 1. He very likely feels hurt by it, and perhaps angry.

___ 2. It may bother him at first, but he will probably get accustomed to it and it won't make much difference to him.

___ 3. It is difficult to know how he would feel in a situation such as this; perhaps with more information about this person we could tell.

___ 4. He would probably think that it is a local rule, and that it maintains the status quo.

10. A Puerto Rican in New York is trying to find an apartment and goes to an attractive apartment building. The agent meets him, and explains that he would like to rent to him but that the tenants wouldn't like having a Puerto Rican in the building. The agent suggests another very good building that specializes in apartments for non-whites. How do you think the Puerto Rican is likely to react to this?

___ 1. He will probably appreciate the agent's help in recommending another good building.

___ 2. It is not easy to know what such a person would really think.

___ 3. He may well be sad to learn that the people in the building don't want to live near him.

___ 4. Very likely he would think nothing special of it, but just keep on looking until he finds a good place that takes Puerto Ricans.

11. A group of colored teenagers decide to picket and "sit in" at a drug store counter where coloreds are not allowed to sit with whites. What is the most likely reason for their acting in this way?

___ 1. They strongly dislike the drug store's policy and want to get it changed.

___ 2. They are probably out on a lark, doing this mostly because it seems exciting.

___ 3. The average white person in a different city cannot really understand the situation completely.

___ 4. It is likely that they are being put up to this by some radical organization.

12. A white gentile stopped at a hotel in Miami, Florida. While attempting to register for a room, the desk clerk indicated that the management catered to a Jewish clientele, served only Kosher food, and suggested that the gentlemen would prefer a non-restricted hotel down the street. How do you think this gentile person would react?

___ 1. He would register anyway, because he liked Kosher food.

___ 2. He would resent it at first, but would go to the other hotel and soon forget the whole incident.

___ 3. He would be very upset to know that he was not welcome at this hotel and would quickly leave.

___ 4. He might be upset, but he would expect it from people like this.

13. The daily newspaper carries a story describing how a certain club in another city refused to admit a woman to membership because of her Japanese ancestry. How do you suppose Japanese readers of the newspaper are likely to react when they read the story?

___ 1. The Japanese are so different that it is hard for a person who hasn't really studied them to know for sure how they would react.

___ 2. They might very much resent having a Japanese person treated in this way.

___ 3. They would probably read the article with interest, but not worry over it if the people in the other city were not known personally to them.

___ 4. They would probably think that the woman was wrong in trying to join a white club in the first place when there are plenty of fine Japanese clubs.

14. The white school board in a community builds two new schools and fixes the school lines so that almost all the colored children go to one new school and all the white children to the other new school. How do you suppose most of the Negroes in the community would react to this?

___ 1. While there are some exceptions, many Negroes are mainly concerned with getting money for food, rent, and other things, and so do not have too much interest in the matter of schools one way or the other.

___ 2. Every community is different, and it is almost impossible for someone not living there to know enough about the situation to judge.

___ 3. The average Negro mother or father would not like what the school board has done about drawing school lines.

___ 4. The average Negro parent would simply be pleased to have a new school for his children, especially if it was equal to the white school in every way.

15. A Jewish couple is out for a drive in the country, and they pass a fine private club. The club has a sign out front describing the advantages of membership in the club, and at the bottom it says "Membership reserved for Christians only." How do you think the Jewish couple is likely to react to this?

___ 1. It makes them unhappy to realize that they are not wanted in the club.

___ 2. They might think that they could easily join a Jewish club with twice the advantages of the club they are passing.

___ 3. It is heard for a Christian to know for certain just how Jewish people react to a sign of this sort.

___ 4. They may read the sign quickly, but probably wouldn't think much of it for very long.

16. A well-dressed colored man answers a "Home for Sale" advertisement in the newspaper. It happens that the home is in an all-white neighborhood. Despite the fact that the real estate agent clearly doesn't want to sell the home to him, the colored man asks to look it over. After he has looked it over, he asks to fill out an application to buy it and to leave a deposit. What is most likely the colored man's real reason for this action?

___ 1. He may have connections with a business group or some other kind of group that is trying to scare white owners into selling their homes at lower prices.

___ 2. He probably thinks it is a good house for his family at the price and convenient to his work.

___ 3. Probably he is well-meaning enough, but just hasn't realized that the neighborhood is completely white and wants to stay white.

___ 4. It is impossible to know in this case whether the colored person is simply making a mistake, or has some scheme in the back of his mind. Only a careful investigation of his real motives could answer the question.

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